

"REVISED"  
CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

PERMITTEE

Electric Energy, Inc.  
Attn: Rick Diericx  
1500 Eastport Plaza Drive  
Collinsville, Illinois 62234

Application No.: 95090120 I.D. No.: 127855AAC  
Applicant's Designation: Joppa Power Station  
Operation of: Electric Power Plant

Original Date Received: September 8, 1995  
Original Date Issued: September 29, 2005  
Effective Date of this Permit: TBD  
Expiration Date<sup>1</sup>: TBD

Source Location: 2100 Portland Road, Joppa, Massac County  
Responsible Official: Gregory T. Russell, Managing Director, Plant Operations

Permit Authorization:

This permit is hereby granted to the above-designated Permittee for operation of the above-referenced source. This permit is subject to the terms and conditions contained herein.

Type of Permit Action: Reopening for Cause  
Date Permit Action Taken: TBD  
Description of Permit Action: Update Permit

This permit authorization has been provided for the revisions to this CAAPP permit, as further described in the statement of basis that accompanied the draft of this revised permit, that have been made by the procedures for "reopening of CAAPP permits for cause" at Section 39.5(15)(a) and (c) of the Illinois Environmental Protection Act. These revisions make changes to the CAAPP permit to address new applicable requirements for emission units covered by the permit, which requirements have become applicable to these units since the issuance of the initial CAAPP permit. In addition, certain requirements that are no longer applicable to these units have been removed from the permit.

Please note that this CAAPP permit has been revised by multiple processes under the CAAPP, each with different legal authority, procedures and standards for issuance. Because of the interplay of the various revisions, a single revised permit has been prepared. Separate permit authorizations are provided for other revisions to this permit, which were made by other processes under the CAAPP.

The federal Acid Rain Permit issued to Joppa Power Station by the Illinois EPA has been revised at the request of the source and is incorporated into this CAAPP permit (Refer to Attachment 5).

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<sup>1</sup> Except as addressed in Condition 8.7 of this permit.

If you have any questions concerning this permit, please contact the Utility Unit at 217/785-1705 (217/782-9143 TDD).

Raymond E. Pilapil  
Manager, Permit Section  
Division of Air Pollution Control

REP:MTR:DLR:clc

cc: Illinois EPA, FOS, Region 3  
USEPA

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Source Location: 2100 Portland Road, Joppa, Massac County  
Responsible Official: Gregory T. Russell, Managing Director, Plant Operations

Permit Authorization:

This permit is hereby granted to the above-designated Permittee for operation of the above-referenced source. This permit is subject to the terms and conditions contained herein.

Type of Permit Action: Significant Modification  
Date Application Received: TBD  
Date Permit Action Taken: TBD  
Description of Permit Action: Resolve Appeal and CAM Incorporation

This permit authorization has been provided for the revisions to the CAAPP permit, as further described in the statement of basis that accompanied the draft of this revised permit, that have been made by the procedures for significant modifications to CAAPP permits at Section 39.5(14)(c) of the Illinois Environmental Protection Act. These revisions include other changes to this CAAPP permit that would not have been proper to address in the reopening and that do not meet the criteria in the Act for minor modifications and administrative amendments of CAAPP permits.

Please note that this CAAPP permit has been revised by multiple processes under the CAAPP, each with different legal authority, procedures and standards for issuance. Because of the interplay of the various revisions, a single revised permit has been prepared. Separate permit authorizations are provided for other revisions to this permit, which were made by other processes under the CAAPP.

If you have any questions concerning this permit, please contact the Utility Unit at 217/785-1705 (217/782-9143 TDD).

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<sup>1</sup> Except as addressed in Condition 8.7 of this permit.

Raymond E. Pilapil  
Manager, Permit Section  
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REP:MTR:DLR:clc

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Applicant's Designation: Joppa Power Station  
Operation of: Electric Power Plant

Original Date Received: September 8, 1995  
Original Date Issued: September 29, 2005  
Effective Date of this Permit:    
Expiration Date<sup>1</sup>: TBD

Source Location: 2100 Portland Road, Joppa, Massac County  
Responsible Official: Gregory T. Russell, Managing Director, Plant Operations

Permit Authorization:

This permit is hereby granted to the above-designated Permittee for operation of the above-referenced source. This permit is subject to the terms and conditions contained herein.

Type of Permit Action: Minor Modification  
Date Application Received: TBD  
Date Permit Action Taken: TBD  
Description of Permit Action: Resolve Appeal

This permit authorization has been provided for these revisions of the CAAPP permit that have been made by the procedures for minor modifications of CAAPP permits at Section 39.5(14)(a)(i) of the Illinois Environmental Protection Act. These revisions involve changes to the existing requirements of this CAAPP permit that were not significant but were not appropriate to be addressed as part of the reopening of this permit or as administrative amendments of this permit.

Please note that this CAAPP permit has been revised by multiple processes under the CAAPP, each with different legal authority, procedures and standards for issuance. Because of the interplay of the various revisions, a single revised permit has been prepared. Separate permit authorizations are provided for other revisions to this permit, which were made by other processes under the CAAPP.

If you have any questions concerning this permit, please contact the CAAPP Unit at 217/785-1705 (217/782-9143 TDD).

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<sup>1</sup> Except as addressed in Condition 8.7 of this permit.

Raymond E. Pilapil  
Manager, Permit Section  
Division of Air Pollution Control

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Application No.: 95090120 I.D. No.: 127855AAC  
Applicant's Designation: Joppa Power Station  
Operation of: Electric Power Plant

Original Date Received: September 8, 1995  
Original Date Issued: September 29, 2005  
Effective Date of this Permit: [REDACTED]  
Expiration Date<sup>1</sup>: [REDACTED]

Source Location: 2100 Portland Road, Joppa, Massac County  
Responsible Official: Gregory T. Russell, Managing Director, Plant  
Operations

Permit Authorization:

This permit is hereby granted to the above-designated Permittee for operation of the above-referenced source. This permit is subject to the terms and conditions contained herein.

Type of Permit Action: Administrative Amendment  
Date Application Received: TBD  
Date Permit Action Taken: TBD  
Description of Permit Action: Resolve Appeal

This permit authorization has been provided for the revisions of the CAAPP permit that have been made by the procedures for administrative amendments of CAAPP permits at Section 39.5(13) of the Illinois Environmental Protection Act. These changes involve typographical corrections and minor administrative changes. The revised federal Acid Rain Program Permit, which was issued by the Illinois EPA for this source in another permit action, has also been included in this revised CAAPP permit as Attachment 5.

Please note that this CAAPP permit has been revised by multiple processes under the CAAPP, each with different legal authority, procedures and standards for issuance. Because of the interplay of the various revisions, a single revised permit has been prepared. Separate permit authorizations are provided for other revisions to this permit, which were made by other processes under the CAAPP.

If you have any questions concerning this permit, please contact the CAAPP Unit at 217/785-1705 (217/782-9143 TDD).

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<sup>1</sup> Except as addressed in Condition 8.7 of this permit.

Raymond E. Pilapil  
Manager, Permit Section  
Division of Air Pollution Control

REP:MTR:DLR:clc

cc: Illinois EPA, FOS, Region 3  
USEPA



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## 1.0 INTRODUCTION

## 1.1 Source Identification

Joppa Power Station  
 2100 Portland Road  
 Joppa, Illinois 62953  
 618/543-7531

I.D. No.: 127855AAC  
 Office of Regulatory Information Systems (ORIS) Code: 887

Standard Industrial Classification Code:  
 4911 (Electric, Gas, and Sanitary Services - Electric Services)

## 1.2 Owner/Parent Company

Electric Energy, Inc.  
 1500 Eastport Plaza Drive  
 Collinsville, Illinois 62234

## 1.3 Operator

Electric Energy, Inc.  
 1500 Eastport Plaza Drive  
 Collinsville, Illinois 62234

Rick Diericx618/343-7761

## 1.4 General Source Description

Electric Energy, Inc. operates six coal-fired boilers and associated steam turbine generators at its power plant in Joppa to produce electricity.

## 1.5 Title I Conditions

This CAAPP permit contains certain conditions for units at this source that address the applicability of permitting programs for the construction and modification of sources, which programs were established pursuant to Title I of the Clean Air Act (CAA) and regulations thereunder. These programs include 40 CFR 52.21, Prevention of Significant Deterioration (PSD) and 35 IAC Part 203, Major Stationary Sources Construction and Modification (MSSCAM), and are implemented by the Illinois EPA pursuant to Sections 9, 9.1, 39(a) and 39.5(7)(a) of Illinois' Environmental Protection Act (Act). These "Title I conditions" within this permit are specifically designated as "T1," if they reflect requirements established in construction permits issued for this source, "T1R" if they revise requirements established in such construction permits, or "T1N" if they are newly established in

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this CAAPP permit. These conditions continue in effect, notwithstanding the expiration date specified on the first page of this permit, as their authority derives from Titles I and V of the CAA, as well as Titles II and X of the Act. (See also Condition 8.7.)

## 2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

acfm	actual cubic feet per minute
ACI	Activated Carbon Injection
Act	Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
BART	Best Available Retrofit Technology
Btu	British thermal unit
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAIR	Clean Air Interstate Rule
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CMS	Continuous Monitoring System(s)
CO	Carbon Monoxide
CSAPR	Cross-State Air Pollution Rule
dcfm	dry cubic feet per minute
DSI	Dry Sorbent Injection
EGU	Electrical Generating Unit
ESP	electrostatic precipitator
°F	degrees Fahrenheit
ft	foot
ft <sup>3</sup>	cubic foot
FGC	Flue Gas Conditioning
Gal	Gallon
GWh	Gigawatt hour (1.0E+3 MWh)
HAP	Hazardous Air Pollutant(s)
hr	hour
IAC	Illinois Administrative Code
I.D. No.	Illinois EPA Identification Number of Source
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
°K	degrees Kelvin
Kg	kilogram
kW	kilowatt
lb	pound
LNB	Low NOx Burners
LP	Liquid Propane
m	meter
MACT	Maximum Achievable Control Technology
MATS	Mercury and Air Toxics Standard - 40 CFR 63 Subpart UUUUU
mmBtu	million British thermal units
MW	Megawatt
MWh	Megawatt hour
NESHAP	National Emission Standards for Hazardous Air Pollutants

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## 2.0 - List of Abbreviations/Acronyms Used in This Permit

NOx	Nitrogen Oxides
NSPS	New Source Performance Standards (40 CFR Part 60)
NSSA	New Source Set-Aside
OM	Organic Material
ORIS	Office of Regulatory Information System
OFA	Over-Fire Air
PM	Particulate Matter
PM CPMS	Particulate Matter Continuous Parametric Monitoring System
PM <sub>2.5</sub>	Particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 microns as measured by applicable test or monitoring methods
PM <sub>10</sub>	Particulate Matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	parts per million
PSD	Prevention of Significant Deterioration, 40 CFR 52.21
psia	pounds per square inch absolute
RATA	Relative Accuracy Test Audit
RICE	Reciprocating Internal Combustion Engine
RMP	Risk Management Plan
SO <sub>2</sub>	Sulfur Dioxide
T	Ton (2000 pounds)
TBtu	1.0E+12 British thermal units
TR	Transport Rule
T1	Title I - identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOC or VOM	Volatile Organic Compounds or Volatile Organic Material
VOL	Volatile Organic Liquid
yr	year

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### 3.0 CONDITIONS FOR INSIGNIFICANT ACTIVITIES

#### 3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

- 3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a) (1) and 201.211, as follows:

Two hydrazine systems used for the dilution and feeding of hydrazine solution to the boilers, each with a total capacity of less than 1,000 gallons. (Each system includes a number of small tanks.)

Hydrochloric Acid Storage Tank

- 3.1.2 Activities that are insignificant activities based upon maximum emissions of regulated air pollutants in the absence of air pollution control equipment, pursuant to 35 IAC 201.210(a) (2) or (a) (3), as follows:

Sulfuric Acid Storage Tanks

Activated Carbon Silos with Bin Vent Filters

- 3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a) (4) through (18), as follows:

Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (a) units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (b) units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (c) units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a) (4)].

Equipment used for filling drums, pails, or other packaging containers, excluding aerosol cans, with soaps, detergents, surfactants, lubricating oils, waxes, vegetable oils, greases, animal fats, glycerin, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions [35 IAC 201.210(a) (8)].

Storage tanks of organic liquids with a capacity of less than 10,000 gallons and an annual throughput of less than 100,000 gallons that are not used to store gasoline or any HAP [35 IAC 201.210(a)(10)(A)]

Storage tanks of any size containing virgin or re-refined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oils [35 IAC 201.210(a)(11)].

Gas turbines and stationary reciprocating internal combustion engines of between 112 KW and 1,118 KW (150 and 1,500 horsepower) power output that are emergency or standby units [35 IAC 201.210(a)(16)]. Storage tanks of any size containing exclusively soaps, detergents, surfactants, glycerin, waxes, vegetable oils, greases, animal fats, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions, provided an organic solvent has not been mixed with such materials [35 IAC 201.210(a)(17)].

#### 3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b).

Note: The heating of a coal-fired boiler with auxiliary fuel during maintenance and repair of the boiler is considered an insignificant activity under 35 IAC 201.210(b)(29) and is generally not addressed by the unit-specific conditions of this permit for coal fired boilers. Notwithstanding such status as an insignificant activity, the opacity of the exhaust from each coal fired boiler is at all times subject to the applicable opacity standard and the unit-specific conditions of this permit for boilers that relate to opacity are applicable during maintenance and repair of a boiler.

### 3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.2.2), the Permittee shall comply with the following requirements, as applicable:

- 3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182.
- 3.2.2 For each particulate matter process emission unit, other than units excluded by 35 IAC 212.323 or 212.681, the

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Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.

- 3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.

### 3.3 Addition of Insignificant Activities

- 3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).
- 3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.
- 3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

### 3.4 Emergency Generator LP Engine

#### 3.4.1 Description

The Permittee operates one small 230-bhp liquid propane (LP)-fueled emergency generator engine, which was installed in May 1987. The generator is used on an emergency basis during interruptions or outages of normal power supply, and is equipped with a non-resettable hour meter.

Note: The description in Condition 3.4.1 is for informational purposes only and implies no limits or constraints.

#### 3.4.2 Applicable Federal Emission Standards

- a. i. The affected engine is subject to the federal National Emission Standards for Hazardous Air

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Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines. The Permittee must comply with applicable requirements of this NESHAP, 40 CFR 63 Subpart ZZZZ, and related requirements of 40 CFR 63, Subpart A, General Provisions, for the affected engine.

#### 3.4.3 Applicable State Emission Standards

- a. i. The standard that addresses the opacity of the emission of smoke or other particulate matter from the affected engine is set forth in Condition 5.2.2(b).
- b. The emission of sulfur dioxide (SO<sub>2</sub>) into the atmosphere from the affected engine shall not exceed 2,000 ppm pursuant to 35 IAC 214.301.

#### 3.4.4 Non-Applicability Provisions

- a. The affected engine is not subject to the requirements of the federal Acid Rain Program because it is not a utility unit. (Refer to 40 CFR 72.2 and 72.6.) Accordingly, electricity generated by the affected engine may not be sold to the power grid on a commercial basis.
- b. The affected engine is not subject to the requirements of 35 IAC Part 212, Subpart L, because a process weight rate cannot be set, due to the nature of such unit, so that these rules cannot reasonably be applied, pursuant to 35 IAC 212.323.
- c. The affected engine is not subject to the NSPS, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, 40 CFR 60 Subpart JJJJ, because the affected emergency engine was not constructed on or after January 1, 2009.
- d. The affected engine is not subject to the fuel sulfur content limitations in 35 IAC 214.305(a) because the engine is not fired with residual fuel oil or distillate fuel oil. The affected engine is only fired with liquid propane.

#### 3.4.5 Work Practices and Operational Limitations

- a. Pursuant to 40 CFR 63.6625(f), the Permittee shall operate and maintain a non-resettable hour meter on the affected engine.

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- b.
    - i. The affected engine shall not be operated for any purpose other than emergency operation and maintenance and operational testing, as described in Condition 3.4.5(b) (ii) below, pursuant to 40 CFR 63.6640(f).
    - ii. Operation of the affected engine for maintenance checks and readiness testing shall be limited to 100 hours per calendar year so that the engine qualifies as an emergency engine for purposes of the NESHAP, as provided in 40 CFR 63.6640(f). Pursuant to 40 CFR 63.6640(f), an emergency stationary RICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The Permittee is prohibited any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as provided for by 40 CFR 63.6640(f).
  - c. Pursuant to 40 CFR 63.6625(e) and Item 9 of Table 6 to 40 CFR 63 Subpart ZZZZ, the Permittee shall comply with the following work practice requirements:
    - i. Operate and maintain the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions, or
    - ii. Develop and follow the Permittee's own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
  - d. Pursuant to 40 CFR 63.6602 and Item 6 of Table 2c to 40 CFR 63 Subpart ZZZZ, the Permittee shall comply with the following work practice requirements:
    - i. Change oil and filter every 500 hours of operation or annually, whichever comes first.\*
    - ii. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.

- iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

\* Sources have the option to utilize an oil analysis program as described in 40 CFR 63.6625(j) in order to extend the specified oil change requirement.

#### 3.4.6 Opacity and Visible Emissions Observations

Pursuant to Sections 39.5(7)(b) and (d) of the Act,

- a. Upon written request by the Illinois EPA, the Permittee shall have the opacity of the exhaust from the affected engine during representative operating conditions determined by a qualified observer in accordance with Reference Method 9, as further specified below. These observations shall be conducted within 45 calendar days of the date of the request, or on the date the affected engine next operates, or by the date agreed upon by the Illinois EPA, whichever is latest.
- b.
  - i. The Permittee shall notify the Illinois EPA at least 7 days in advance of the date and time of testing, in order to allow the Illinois EPA to witness testing. This notification shall include the name and employer of the observer(s) and identify any concerns for successful completion of observations, i.e., lack of suitable point for proper observation or inability to conduct observations under specified operating conditions.
  - ii. The Permittee shall promptly notify the Illinois EPA of any changes in the date or time of testing.
- c. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of testing, if Illinois EPA personnel are present.
- d. The Permittee shall submit a written report for these observations within 15 days of the date of observation. This report shall include:
  - i. Date and time of testing.
  - ii. Name and employer of qualified observer.
  - iii. Copy of current certification.

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- iv. Description of observation conditions.
- v. Description of engine operating conditions.
- vi. Raw data.
- vii. Opacity determinations.
- viii. Conclusions.

#### 3.4.7 Recordkeeping Requirements

- a. For the affected engine, the Permittee shall fulfill applicable recordkeeping requirements of the NESHAP described in 40 CFR 63.6655(f).
- b. Pursuant to Section 39.5(7) of the Act, for each affected engine, the Permittee shall maintain the following records:
  - i. Maintenance and repair records, listing each activity performed with date.
  - ii. Records of the operating hours or fuel usage of the affected engine (engine-hours/month and engine-hours/year or gallons fuel/month and gallons fuel/year) with date, time, duration, and purpose (i.e., exercise or emergency need).
  - iii. Records for opacity observations made in accordance with Reference Method 9 for the affected engine that it conducts or that are conducted on its behest by individuals who are qualified to make such observations. For each occasion on which such observations are made, these records shall include the identity of the observer, a description of the various observations that were made, the observed opacity, and copies of the raw data sheets for the observations.

#### 3.4.8 Reporting Requirements

- a. Pursuant to Section 39.5(7) of the Act,
  - i. If there is a deviation from the requirements for the affected engine, the Permittee shall report the deviation with the periodic compliance report for the coal-fired boilers.

## 4.0 EMISSION UNITS AT THIS SOURCE

Equipment Identification	Description	Emission Control Equipment/Measures	Ref*
Insignificant Activities		-	3.0
Boiler 1	Boiler Equipped With Low-NOx Burners, Capable of Firing Coal, a Combination of Coal and Natural Gas, or Natural Gas Only	ESP, OFA, FGC and ACI	7.1
Boiler 2	Boiler Equipped With Low-NOx Burners, Capable of Firing Coal, or a Combination of Coal and Natural Gas	ESP, OFA, FGC and ACI	
Boiler 3	Boiler Equipped With Low-NOx Burners, Capable of Firing Coal, or a Combination of Coal and Natural Gas	ESP, OFA, FGC and ACI	
Boiler 4	Boiler Equipped With Low-NOx Burners, Capable of Firing Coal Only, a Combination of Coal and Natural Gas, or Natural Gas Only	ESP, OFA, FGC and ACI	
Boiler 5	Boiler Equipped With Low-NOx Burners, Capable of Firing Coal, or a Combination of Coal and Natural Gas	ESP, OFA, FGC and ACI	
Boiler 6	Boiler Equipped With Low-NOx Burners, Capable of Firing Coal, or a Combination of Coal and Natural Gas	ESP, OFA, FGC and ACI	
Coal Handling Equipment	Coal Receiving, Transfer, and Storage Operations	Moisture Content of the Coal, Dust Suppression, Enclosures and Covers, Fogging and Dust Extraction	7.2
Coal Processing Equipment	Coal Crushing Operations	Enclosures and Covers, Dust Suppression, Moisture Content and Fogging	7.3
Gasoline Storage Tank	Storage Tank with Submerged Loading Pipe	None	7.4
Fly Ash Handling Equipment	Fly Ash Handling Equipment including pneumatic removal, storage and loadout of dry fly ash and batch mixing and loadout of wet conditioned fly ash	Moisture Content of the Fly Ash, Enclosures, Covers, Enclosed Chute, Dust Suppression and Dust Collection Devices	7.6

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Note: The information and descriptions contained in this table are for informational purposes only and imply no limits or constraints.
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\*       Reference to the Unit Specific Conditions in Section 7 or  
Insignificant Activities in Section 3 of this permit.

## 5.0 OVERALL SOURCE CONDITIONS

## 5.1 Applicability of Clean Air Act Permit Program (CAAPP)

- 5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of SO<sub>2</sub>, CO, NO<sub>x</sub>, PM, VOM and HAP emissions.
- 5.1.2 This permit is issued based on the source requiring a CAAPP permit as an "affected source" for the purposes of Acid Deposition Control, Title IV of the Clean Air Act.
- 5.1.3 The source is considered a single source with the following entities:
  - a. Midwest Electric Power, Inc., ID No. 127899AAA, Permit 01050058, located at 2200 Portland Road, Joppa.
  - b. Joppa Refined Coal, ID No. 127015ABE, Permit 14060030 located at 2100 Portland Road, Joppa.

## 5.2 Applicable Regulations

- 5.2.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions) of this permit.
- 5.2.2 In addition, emission units at this source are subject to the following regulations of general applicability. Appropriate compliance procedures addressing these regulations are set forth for specific emission units in Section 7 of this permit:
  - a. i. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith (i.e., overhead) at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.
  - ii. The Permittee shall conduct observations at the property line of the source for visible emissions of fugitive particulate matter from the source to address compliance with 35 IAC 212.301, upon request by the Illinois EPA, as follows: For this purpose, daily observations shall be conducted for a week for particular area(s) of concern at the source, as specified in the request. Observations shall begin either within one day or three days of receipt of a written request from

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the Illinois EPA, depending, respectively, upon whether observations will be conducted by employees of the Permittee or a third-party observer hired by the Permittee to conduct observations on its behalf. The Permittee shall keep records for these observations, including identity of the observer, the date and time of observations, the location(s) from which observations were made, and duration of any fugitive emissions event(s).

- b. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) or 212.124.

#### 5.2.3 Ozone Depleting Substances

The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, including the following:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be appropriately certified by an approved technician certification program pursuant to 40 CFR 82.161.

#### 5.2.4 Risk Management Plan (RMP)

Should this stationary source, as defined in 40 CFR 68.3, become subject to the federal rules for Chemical Accident Prevention in 40 CFR Part 68, then the owner or operator shall submit:

- a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or
- b. A certification statement that the source is in compliance with all applicable requirements of 40 CFR Part 68, including the registration and submission of

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the RMP, as part of the annual compliance certification required by Condition 9.8.

Note: This condition is imposed pursuant to 40 CFR 68.215(a).

#### 5.2.5 Future Emission Standards

- a. Should this source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC Subtitle B after the date issued of this permit, the Permittee shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance or otherwise demonstrate initial compliance as provided by such regulation. Following the submittal of such a compliance certification or initial compliance demonstration, the Permittee shall address the applicable requirements of such regulation as part of the annual compliance certification required by Condition 9.8.

Note: This permit may also have to be revised or reopened to address such newly applicable regulations, as provided by Section 39.5(15) (a) of the Act. (See Condition 9.12.2.)

- b. This permit and the terms and conditions herein do not affect the Permittee's past and/or continuing obligation with respect to statutory or regulatory requirements governing major source construction or modification under Title I of the CAA. Further, neither the issuance of this permit nor any of the terms or conditions of the permit shall alter or affect the liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance.

#### 5.2.6 Episode Action Plan

- a. Pursuant to 35 IAC 244.141, the Permittee shall have on file with the Illinois EPA an approved Episode Action Plan for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The Episode Action Plan shall contain the information specified in 35 IAC 244.144.
- b. Pursuant to 415 ILCS 5/39.5(7) (a), the Episode Action Plan, as submitted by the Permittee on July 23, 2015, is incorporated herein by reference. Any revision to the plan submitted to Illinois EPA while this permit is in effect is automatically incorporated by

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reference, provided the revision is not expressly disapproved, in writing, by the Illinois EPA within 30 days of receipt of the revision. Upon such automatic incorporation, the revised plan replaces the version of the plan previously incorporated by reference.

- c. The plan incorporated by reference into this permit constitutes the approved Episode Action Plan required by 35 IAC 244.141, addressing the actions that will be implemented to reduce SO<sub>2</sub>, PM<sub>10</sub>, NO<sub>2</sub>, CO and VOM emissions from various emissions units at the source in the event of a yellow alert, red alert or emergency issued under 35 IAC 244.161 through 244.165.
- d. Pursuant to 35 IAC 244.169, or as may otherwise be required under 35 IAC 244, Appendix D, the Permittee shall immediately implement the appropriate steps described in the approved Episode Action Plan upon receiving notice from the Illinois EPA.
- e. Pursuant to 35 IAC 244.143(d), if an operational change occurs at the source which invalidates the approved Episode Action Plan, a revised Episode Action Plan shall be submitted to the Illinois EPA for review and approval within 30 days of the change.
- f. Pursuant to Section 35 IAC 244.145(b), in the event that the Illinois EPA notifies the Permittee of a deficiency with any Episode Action Plan submitted pursuant to 35 IAC Part 244, the Permittee shall be required to revise and resubmit the Episode Action Plan within 30 days of receipt of notification to address the deficiency.
- g. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall keep a copy of the approved Episode Action Plan along with a record of activities completed according to the Episode Action Plan.

#### 5.2.7 Intentionally Blank

#### 5.2.8 Control Measures Record

- a. i. The Control Measures Record, as submitted by the Permittee on November 7, 2016, is incorporated herein by reference and constitutes the Control Measures Record required by Conditions 7.2.9(b), 7.3.9(b) and 7.6.9(b). Any revised version of the Control Measures Record prepared by the Permittee and submitted to Illinois EPA while this permit is in effect is automatically

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incorporated by reference. Upon such automatic incorporation, the revised plan replaces the version of the plan previously incorporated by reference.

- ii. In the event that within 30 days of receipt of a revised Control Measures Record the Illinois EPA notifies the Permittee in writing of any deficiency with the revision, then, within 30 days of such notice, the Permittee shall respond with relevant additional information or a further revision to the Control Measures Record.

- b. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep a copy of the Control Measures Record and any amendments or revisions to the Control Measures Record (as required by Conditions 7.2.9(b), 7.3.9(b) and 7.6.9(b)).

5.3 Intentionally Blank.

5.4 Intentionally Blank.

5.5 Source-Wide Emission Limitations

5.5.1 Permitted Emissions for Fees

Emission limitations are not set for this source for the purpose of permit fees. Rather, the Permittee shall pay the maximum fee required pursuant to Section 39.5(18)(a)(ii)(A) of the Act. (See also Condition 9.4.) (State-Only Requirement)

5.6 General Recordkeeping Requirements

5.6.1 Records for Emissions

The Permittee shall maintain records for the source to prepare its Annual Emission Report pursuant to 35 IAC 254.134.

5.6.2 Retention and Availability of Records

The Permittee shall comply with the following requirements with respect to retention and availability of records pursuant to Sections 4(b) and 39.5(7)(a), (b), (e)(ii), (o)(v), and (p)(ii)(A) and (B) of the Act.

- a. All records required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the

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particular recordkeeping provision herein), shall be readily accessible to the Permittee, the Illinois EPA and USEPA, and made available for inspection and copying by the Illinois EPA or USEPA upon request.

- b. In response to an Illinois EPA or USEPA request made during the course of an inspection of the source, the Permittee shall retrieve and provide paper copies, or as electronic media, any records required by this permit that are retained in an electronic format (e.g., computer). Such response shall be provided at the time of the inspection; however, if the Permittee believes that the volume and nature of the requested material would make this overly burdensome, material shall be provided no later than 10 days thereafter unless a later date is agreed upon by the Permittee, Illinois EPA, and/or the USEPA.
- c. Upon written request by the Illinois EPA for copies of records or reports required to be kept by this permit, the Permittee shall promptly submit a copy of such material to the Illinois EPA. For this purpose, material shall be submitted to the Illinois EPA within 30 days unless additional time is provided by the Illinois EPA or the Permittee believes that the volume and nature of requested material would make this overly burdensome, in which case, the Permittee shall respond within 30 days with the explanation and a schedule for submittal of the requested material. (See also Condition 9.12.4.)

## 5.7 General Reporting Requirements

### 5.7.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA of deviations of the source with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

- a. For emissions units that are addressed by the unit-specific conditions of this permit, the timing for reporting of deviations shall be in accordance with such conditions.
- b. i. For other emissions units and activities at the source, the timing for reporting of deviations shall be in accordance with the provisions of relevant regulations if such provisions address timing of deviation

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reports.

- ii. Otherwise, if the relevant regulations do not address timing of deviation reports, deviation reports shall be submitted within 30 days.

#### 5.7.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information for the previous calendar year, as specified by 35 IAC Part 254 [Sections 4(b) and 39.5(7) (a), (b) and (f) of the Act].

#### 5.8 Intentionally Blank.

#### 5.9 Implementation of Permit Upon Date of Initial Effectiveness

- a. If this revised permit becomes effective during the fourth quarter of a given year, any annual (identified by the permit as calendar year or otherwise) or semi-annual inspection or observation requirements, including the combustion evaluations for the coal-fired boilers, the opacity observations for the coal handling, coal processing and fly ash equipment, and the submerged fill pipe inspection for the gasoline storage tank, need not be performed by the Permittee until the following year.
- b. If this revised permit becomes effective on or after the 45th day of a given quarter, any quarterly testing, inspection and observation requirements, including the PM and CO emission measurements based on the use of alternative fuel relative to standard fuel, need not be performed by the Permittee until the following quarter.
- c. If this revised permit becomes effective on or after the 15th day of a given month, any monthly inspection requirements, including the monthly inspections of affected operations for the coal handling, coal processing and fly ash equipment, need not be performed by the Permittee until the following month.
- d. If this revised permit becomes effective on or after Wednesday of a given week, any weekly inspection requirements, including the weekly inspections for the fly ash loadout equipment, need not be performed by the Permittee until the following week.
- e. The first quarterly report to be submitted pursuant to Condition 7.1.10-2(a) must be submitted as follows. Thereafter, each subsequent quarterly report must be submitted as specified in Condition 7.1.10-2(a) (iii).

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- i. If this revised permit becomes effective before the 45<sup>th</sup> day of a calendar quarter, the report must be submitted within 60 days after the end of that quarter and address the period from the effective date of this permit through the end of that quarter.
- ii. If this revised permit becomes effective on or after the 45<sup>th</sup> day of a calendar quarter, the report must be submitted within 60 days after the end of the first complete quarter in which the permit is effective and address the period from the effective date of this permit through the end of the first complete calendar quarter in which this permit is effective.

6.0 TRADING PROGRAMS

6.1 Intentionally Blank



## 6.2 Acid Rain Program

### 6.2.1 Applicability

Under Title IV of the CAA, Acid Deposition Control, this source is an affected source and the following emission units at the source are affected units for acid deposition:

Boilers 1 through 6

Note: Title IV of the CAA, and regulations promulgated thereunder, establish requirements for affected sources related to control of emissions of pollutants that contribute to acid rain. For purposes of this permit, these requirements are referred to as Title IV provisions.

### 6.2.2 Applicable Emission Requirements

The owners and operators shall not violate applicable Title IV provisions. In particular, NO<sub>x</sub> emissions of affected units shall not exceed the limit set by 40 CFR Part 76, which currently is 0.45 lb NO<sub>x</sub> per million Btu heat input with the ability for averaging among units as allowed by an Acid Rain Permit. SO<sub>2</sub> emissions of the affected units shall not exceed any allowances that the source lawfully holds under Title IV provisions [Section 39.5(7)(g) and (17)(l) of the Act].

Note: Affected sources must hold SO<sub>2</sub> allowances to account for the SO<sub>2</sub> emissions from affected units at the source that are subject to Title IV provisions. Each allowance is a limited authorization to emit up to one ton of SO<sub>2</sub> emissions during or after a specified calendar year. The possession of allowances does not authorize exceedances of applicable emission standards or violations of ambient air quality standards.

### 6.2.3 Monitoring, Recordkeeping and Reporting

The owners and operators shall comply with applicable requirements for monitoring, recordkeeping and reporting specified by Title IV provisions, including 40 CFR Part 75 [Sections 39.5(7)(b) and 39.5(17)(m) of the Act].

Note: As further addressed by Section 7 of this permit, the following emission determination methods are currently being used for the affected units at this source.

NO <sub>x</sub> :	Continuous emissions monitoring (40 CFR 75.12)
SO <sub>2</sub> :	Continuous emissions monitoring (40 CFR 75.11)
Opacity:	Continuous opacity monitoring (40 CFR 75.14)

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6.2.4 Acid Rain Permit

The owners and operators shall comply with the terms and conditions of the source's Acid Rain permit [Section 39.5(17) (1) of the Act].

Note: The source is subject to an Acid Rain permit, which was issued pursuant to Title IV provisions, including Section 39.5(17) of the Act. Affected sources must be operated in compliance with their Acid Rain permits. This source's Acid Rain permit is incorporated by reference into this permit and a copy of the current Acid Rain permit is included as Attachment 5 of this permit. Revisions and modifications of this Acid Rain permit, including administrative amendments and automatic amendments (pursuant to Sections 408(b) and 403(d) of the CAA or regulations thereunder) are governed by Title IV provisions, as provided by Section 39.5(13) (e) of the Act. Accordingly, revision or renewal of the Acid Rain permit may be handled separately from this CAAPP permit and a copy of the new Acid Rain permit may be included in this permit by administrative amendment.

6.2.5 Coordination with Other Requirements

- a. This permit does not contain any conditions that are intended to interfere with or modify the requirements of Title IV provisions (Section 39.5(17) (h) of the Act). In particular, this permit does not restrict the flexibility under Title IV provisions of the owners and operators of this source to amend their Acid Rain compliance plan [Section 39.5(13) (e) of the Act].
- b. Where another applicable requirement of the CAA is more stringent than an applicable requirement of Title IV provisions, both requirements are incorporated into this permit and are enforceable and the owners and operators shall comply with both requirements [Section 39.5(7) (h) of the Act].

6.3 Cross-State Air Pollution Rule (CSAPR)/Transport Rule (TR) Trading Programs

6.3.1 Applicability

The USEPA issued the Cross State Air Pollution Rule (CSAPR)\*, also known as the Transport Rule (TR) in July 2011 to address CAA requirements concerning interstate transport of air pollution and to replace the previous Clean Air Interstate Rule (CAIR). For purposes of CSAPR, this source is a "TR NO<sub>x</sub> Annual source", "TR NO<sub>x</sub> Ozone Season source", and "TR SO<sub>2</sub> Group 1 source." The following emission units at this source are "TR NO<sub>x</sub> Annual units," "TR NO<sub>x</sub> Ozone Season units" and "TR SO<sub>2</sub> Group 1 units":

Joppa Boilers 1 through 6

\* Federal Implementation Plans: Interstate Transport of Fine Particulate Matter and Ozone and Correction of SIP Approvals, 76 FR 48208 (August 8, 2011); Federal Implementation Plans for Iowa, Michigan, Missouri, Oklahoma, and Wisconsin and Determination for Kansas Regarding Interstate Transport of Ozone, 76 FR 80760 (December 27, 2011); Revisions to Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone, 77 FR 10324 (February 21, 2012); Revisions to Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone, 77 FR 34830 (June 12, 2012).

6.3.2 Applicable Emission Requirements

a. TR NO<sub>x</sub> Annual Emissions Requirements

- i. Pursuant to 40 CFR 97.406(c)(1), beginning January 1, 2015,
  - A. As of the allowance transfer deadline for a control period in a given year, the owner and operator shall hold, in the source's compliance account, TR NO<sub>x</sub> Annual allowances available for deduction for such control period under 40 CFR 97.424(a) and 97.406(c)(3) in an amount not less than the tons of total NO<sub>x</sub> emissions for such control period from Joppa Boilers 1 through 6.
  - B. If total NO<sub>x</sub> emissions during a control period in a given year from the TR NO<sub>x</sub> Annual units at a TR NO<sub>x</sub> Annual source are in excess of the TR NO<sub>x</sub> Annual emissions limitation set forth in paragraph (a)(i)(A) above, then:

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- I. The owner and operator and each TR NO<sub>x</sub> Annual unit at the source shall hold the TR NO<sub>x</sub> Annual allowances required for deduction under 40 CFR 97.424(d); and
  - II. The owner and operator and each TR NO<sub>x</sub> Annual unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart AAAAA and the Clean Air Act.
- ii. Beginning January 1, 2017, if total NO<sub>x</sub> emissions during a control period in a given year from all TR NO<sub>x</sub> Annual units at TR NO<sub>x</sub> Annual sources in Illinois exceed the Illinois assurance level, the owner and operator shall comply with the provisions of 40 CFR 97.406(c) (2).
  - iii. Compliance periods.
    - A. A TR NO<sub>x</sub> Annual unit shall be subject to the requirements under Condition 6.3.2(a) (i) for the control period starting on January 1, 2015, and for each control period thereafter [40 CFR 97.406(c) (3) (i)].
    - B. A TR NO<sub>x</sub> Annual unit shall be subject to the requirements under Condition 6.3.2(a) (ii) above for the control period starting on January 1, 2017, and for each control period thereafter [40 CFR 97.406(c) (3) (ii)].
  - iv. Vintage of allowances held for compliance.
    - A. A TR NO<sub>x</sub> Annual allowance held for compliance with the requirements under Condition 6.3.2(a) (i) (A) for a control period in a given year must be a TR NO<sub>x</sub> Annual allowance that was allocated for such control period or a control period in a prior year [40 CFR 97.406(c) (4) (i)].
    - B. A TR NO<sub>x</sub> Annual allowance held for compliance with the requirements under Conditions 6.3.2(a) (i) (B) or 6.3.2(a) (ii) for a control period in a given year must be a TR NO<sub>x</sub> Annual

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allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year [40 CFR 97.406(c)(4)(ii)].

- v. Allowance Management System requirements. Each TR NO<sub>x</sub> Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart AAAAA [40 CFR 97.406(c)(5)].
  - vi. Limited authorization. A TR NO<sub>x</sub> Annual allowance is a limited authorization to emit one ton of NO<sub>x</sub> during the control period in one year. Such authorization is limited in its use and duration as follows:
    - A. Such authorization shall only be used in accordance with the TR NO<sub>x</sub> Annual Trading Program [40 CFR 97.406(c)(6)].
- b. TR NO<sub>x</sub> Ozone Season Emissions Requirements
- i. Pursuant to 40 CFR 97.506(c)(1), beginning May 1, 2015,
    - A. As of the allowance transfer deadline for a control period in a given year, the owner and operator shall hold, in the source's compliance account, TR NO<sub>x</sub> Ozone Season allowances available for deduction for such control period under 40 CFR 97.524(a) and 97.506(c)(3) in an amount not less than the tons of total NO<sub>x</sub> emissions for such control period from Joppa Boilers 1 through 6.
    - B. If total NO<sub>x</sub> emissions during a control period in a given year from the TR NO<sub>x</sub> Ozone Season units at a TR NO<sub>x</sub> Ozone Season source are in excess of the TR NO<sub>x</sub> Ozone Season emissions limitation set forth in Condition 6.3.2(b)(i)(A) above, then:
      - I. The owner and operator and each TR NO<sub>x</sub> Ozone Season unit at the source shall hold the TR NO<sub>x</sub> Annual allowances required for deduction under 40 CFR 97.524(d); and
      - II. The owner and operator and each TR NO<sub>x</sub> Ozone Season unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air

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Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart BBBBB and the Clean Air Act.

- ii. Beginning May 1, 2017, if total NO<sub>x</sub> emissions during a control period in a given year from all TR NO<sub>x</sub> Ozone Season units at TR NO<sub>x</sub> Ozone Season sources in Illinois exceed the Illinois assurance level, the owner and operator shall comply with the provisions of 40 CFR 97.506(c)(2).
- iii. Compliance periods.
  - A. A TR NO<sub>x</sub> Ozone Season unit shall be subject to the requirements under Condition 6.3.2(b)(i) for the control period starting on May 1, 2015, and for each control period thereafter [40 CFR 97.506(c)(3)(i)].
  - B. A TR NO<sub>x</sub> Ozone Season unit shall be subject to the requirements under Condition 6.3.2(b)(ii) above for the control period starting on May 1, 2017, and for each control period thereafter [40 CFR 97.506(c)(3)(ii)].
- iv. Vintage of allowances held for compliance.
  - A. A TR NO<sub>x</sub> Ozone Season allowance held for compliance with the requirements under Condition 6.3.2(b)(i)(A) for a control period in a given year must be a TR NO<sub>x</sub> Annual allowance that was allocated for such control period or a control period in a prior year [40 CFR 97.506(c)(4)(i)].
  - B. A TR NO<sub>x</sub> Ozone Season allowance held for compliance with the requirements under Conditions 6.3.2(b)(i)(B) or 6.3.2(b)(ii) for a control period in a given year must be a TR NO<sub>x</sub> Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year [40 CFR 97.506(c)(4)(ii)].
- v. Allowance Management System requirements. Each TR NO<sub>x</sub> Ozone Season allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart BBBBB [40 CFR 97.506(c)(5)].

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vi. Limited authorization. A TR NO<sub>x</sub> Ozone Season allowance is a limited authorization to emit one ton of NO<sub>x</sub> during the control period in one year. Such authorization is limited in its use and duration as follows:

A. Such authorization shall only be used in accordance with the TR NO<sub>x</sub> Ozone Season Trading Program [40 CFR 97.506(c)(6)].

c. TR SO<sub>2</sub> Emissions Requirements

i. Pursuant to 40 CFR 97.606(c)(1), beginning January 1, 2015,

A. As of the allowance transfer deadline for a control period in a given year, the owner and operator shall hold, in the source's compliance account, TR SO<sub>2</sub> Group 1 allowances available for deduction for such control period under 40 CFR 97.624(a) and 97.606(c)(3) in an amount not less than the tons of total SO<sub>2</sub> emissions for such control period from Joppa Boilers 1 through 6.

B. If total SO<sub>2</sub> emissions during a control period in a given year from the TR SO<sub>2</sub> Group 1 units at a TR SO<sub>2</sub> Group 1 source are in excess of the TR SO<sub>2</sub> Group 1 emissions limitation set forth in paragraph (c)(i)(A) above, then:

I. The owner and operator and each TR SO<sub>2</sub> Group 1 unit at the source shall hold the TR SO<sub>2</sub> Group 1 allowances required for deduction under 40 CFR 97.624(d); and

II. The owner and operator and each TR SO<sub>2</sub> Group 1 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart CCCCC and the Clean Air Act.

ii. Beginning January 1, 2017, if total SO<sub>2</sub> emissions during a control period in a given year from all TR SO<sub>2</sub> Group 1 units at TR SO<sub>2</sub> Group 1 sources in Illinois exceed the Illinois assurance level, the

owner and operator shall comply with the provisions of 40 CFR 97.606(c) (2).

iii. Compliance periods.

- A. A TR SO<sub>2</sub> Group 1 unit shall be subject to the requirements under Condition 6.3.2(c) (i) for the control period starting on January 1, 2015, and for each control period thereafter [40 CFR 97.606(c) (3) (i)].
- B. A TR SO<sub>2</sub> Group 1 unit shall be subject to the requirements under Condition 6.3.2(c) (ii) above for the control period starting on January 1, 2017, and for each control period thereafter [40 CFR 97.606(c) (3) (ii)].

iv. Vintage of allowances held for compliance.

- A. A TR SO<sub>2</sub> Group 1 allowance held for compliance with the requirements under Condition 6.3.2(c) (i) (A) for a control period in a given year must be a TR SO<sub>2</sub> Group 1 allowance that was allocated for such control period or a control period in a prior year [40 CFR 97.606(c) (4) (i)].
- B. A TR SO<sub>2</sub> Group 1 allowance held for compliance with the requirements under Conditions 6.3.2(c) (i) (B) or 6.3.2(c) (ii) for a control period in a given year must be a TR SO<sub>2</sub> Group 1 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year [40 CFR 97.606(c) (4) (ii)].

v. Allowance Management System requirements. Each TR SO<sub>2</sub> Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart CCCCC [40 CFR 97.606(c) (5)].

vi. Limited authorization. A TR SO<sub>2</sub> Group 1 allowance is a limited authorization to emit one ton of SO<sub>2</sub> during the control period in one year. Such authorization is limited in its use and duration as follows:

- A. Such authorization shall only be used in accordance with the TR SO<sub>2</sub> Group 1 Trading Program [40 CFR 97.606(c) (6)].

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6.3.3 Monitoring, Recordkeeping, and Reporting

- a. The owner or operator must submit to the USEPA Administrator a monitoring plan for each unit in accordance with 40 CFR 75.53, 75.62 and 75.73, as applicable [40 CFR 97.434(b), 97.534(b) and 97.634(b)].
- b. For TR NO<sub>x</sub> Annual emissions, the owner or operator shall comply with the continuous monitoring, recordkeeping, and reporting provisions specified in 40 CFR Part 97 Subpart AAAAA, and 40 CFR Part 75 Subpart H. These provisions include the calculation requirements specified at 40 CFR 97.406(b)(2); the recordkeeping and reporting requirements specified at 40 CFR 97.406(e); the general monitoring, recordkeeping, and reporting requirements specified at 40 CFR 97.430; the monitoring system certification and recertification requirements specified at 40 CFR 97.431; the monitoring system out-of-control requirements specified at 40 CFR 97.432; the notification requirements specified at 40 CFR 97.433; the recordkeeping and reporting requirements specified at 40 CFR 97.434; and the petitions for alternatives to monitoring, recordkeeping, or reporting requirements specified at 40 CFR 75.66 and 97.435.
- c. For TR NO<sub>x</sub> Ozone Season emissions, the owner or operator shall comply with the continuous monitoring, recordkeeping, and reporting provisions specified in 40 CFR Part 97 Subpart BBBBB, and 40 CFR Part 75 Subpart H. These provisions include the calculation requirements specified at 40 CFR 97.506(b)(2); the recordkeeping and reporting requirements specified at 40 CFR 97.506(e); the general monitoring, recordkeeping, and reporting requirements specified at 40 CFR 97.530; the monitoring system certification and recertification requirements specified at 40 CFR 97.531; the monitoring system out-of-control requirements specified at 40 CFR 97.532; the notification requirements specified at 40 CFR 97.533; the recordkeeping and reporting requirements specified at 40 CFR 97.534; and the petitions for alternatives to monitoring, recordkeeping, or reporting requirements specified at 40 CFR 75.66 and 97.535.
- d. For TR SO<sub>2</sub> Group 1 emissions, the owner or operator shall comply with the continuous monitoring, recordkeeping, and reporting provisions specified in 40 CFR Part 97 Subpart CCCCC, and 40 CFR Part 75 Subparts B, F and G. These provisions include the calculation requirements specified at 40 CFR 97.606(b)(2); the recordkeeping and reporting requirements specified at 40 CFR 97.606(e); the general monitoring, recordkeeping, and reporting requirements specified at 40 CFR 97.630; the monitoring system

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certification and recertification requirements specified at 40 CFR 97.631; the monitoring system out-of-control requirements specified at 40 CFR 97.632; the notification requirements specified at 40 CFR 97.633; the recordkeeping and reporting requirements specified at 40 CFR 97.634; and the petitions for alternatives to monitoring, recordkeeping, or reporting requirements specified at 40 CFR 97.635.

6.3.4 Designated Representative and Alternate Designated Representative

Pursuant to 40 CFR 97.406(a), 40 CFR 97.506(a), and 40 CFR 97.606(a), the owners and operators shall comply with the requirement to have a Designated Representative, and may also have an Alternate Designated Representative for Joppa Boilers 1 through 6, in accordance with 40 CFR 97.413 through 418 for the TR NO<sub>x</sub> Annual Trading Program; 40 CFR 97.513 through 518 for the TR NO<sub>x</sub> Ozone Season Trading Program; and 40 CFR 97.613 through 618 for the TR SO<sub>2</sub> Group 1 Trading Program.

6.3.5 Coordination with Other Requirements

- a. Any provisions of the TR NO<sub>x</sub> Annual or Ozone Season or TR SO<sub>2</sub> Group 1 Trading Program that applies to a source or the designated representative shall also apply to the owners and operators of such source and the TR NO<sub>x</sub> Annual or Ozone Season or TR SO<sub>2</sub> Group 1 units at the source [40 CFR 97.406(f)(1), 97.506(f)(1) and 97.606(f)(1)].
- b. Any provisions of the TR NO<sub>x</sub> Annual or Ozone Season or TR SO<sub>2</sub> Group 1 Trading Program that applies to a TR NO<sub>x</sub> Annual or Ozone Season or TR SO<sub>2</sub> Group 1 unit or the designated representative shall also apply to the owners and operators of such unit [40 CFR 97.406(f)(2), 97.506(f)(2) and 97.606(f)(2)].
- c. This permit does not contain any conditions that are intended to interfere with or modify the requirements of the Transport Rule, 40 CFR Part 97 Subparts AAAAA, BBBB or CCCC.
- d. Where another applicable requirement of the CAA is more stringent than an applicable requirement of 40 CFR Part 97 Subparts AAAAA, BBBB, or CCCC, both requirements are incorporated into this permit and are enforceable and the owners and operators of the source shall comply with both requirements [Section 39.5(7)(h) of the Act].
- e. No revision of this CAAPP permit is required for any allocation, holding, deduction, or transfer of TR NO<sub>x</sub> Annual or Ozone Season or TR SO<sub>2</sub> Group 1 allowances in

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accordance with 40 CFR Part 97 Subparts AAAAA, BBBB, or  
CCCCC [40 CFR 97.406(d)(1), 97.506(d)(1) and  
97.606(d)(1)].

6.3.6 Effect on Other Authorities

No provision of the TR NOx Annual or Ozone Season or TR SO2  
Group 1 Trading Programs or exemption under 40 CFR 97.405,  
97.505 or 96.605 shall be construed as exempting or excluding  
the owners and operators, and the designated representative,  
of a TR NOx Annual or Ozone Season or TR SO2 Group 1 source or  
unit from compliance with any other provision of the  
applicable, approved State implementation plan, a federally  
enforceable permit, or the Clean Air Act [40 CFR 97.406(g),  
97.506(g) and 97.606(g)].

6.4 Control of Mercury Emissions from Coal-fired Electric Generating Units and Multi-pollutant Standard (MPS) Requirements for NO<sub>x</sub> and SO<sub>2</sub>

6.4.1 Description

The purpose of 35 IAC Part 225 Subpart B is to limit the emissions of mercury, nitrogen oxides and sulfur dioxide from coal-fired EGUs operating in Illinois. Compliance with the limitations is demonstrated using continuous monitoring systems.

Note: The description in Condition 6.4.1 is for informational purposes only and implies no limits or constraints.

6.4.2 List of Emission Units

The EGUs associated with the following emission units at the source are affected EGUs for the purpose of 35 IAC Part 225 Subpart B:

Joppa Boilers 1 through 6

These affected EGUs are part of the MPS Group as described in the notice of intent submitted to the Illinois EPA in accordance with 35 IAC 225.233(b), which establishes control requirements and standards for emissions of NO<sub>x</sub>, SO<sub>2</sub>, and mercury. The MPS Group consists of the Coffeen, Duck Creek, Edwards, Joppa and Newton Power Stations. Portions of the Illinois Mercury Rule relating to mercury emissions have not been approved in the SIP and therefore will be designated in this permit as "State-Only Requirements".

6.4.3 Emission Standards for EGUs

- a. Pursuant to 35 IAC 225.233(d)(1), the Permittee shall comply with one of the following mercury standards for the affected EGUs, calculated in accordance with 35 IAC 225.230(a) or (d), on a rolling 12-month basis (State-Only Requirement):
  - i. An emission standard of 0.0080 lb mercury/GWh gross electrical output, provided that the Permittee monitors and records gross electrical output in accordance with 35 IAC 225.263 and 35 IAC 225.290(a)(2)(B); or
  - ii. A minimum 90-percent reduction of input mercury, provided that the Permittee conducts the necessary fuel sampling, analysis and recordkeeping in accordance with 35 IAC 225.265.

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- b. Pursuant to 35 IAC 225.233(e) (3) (C) (iv), for the EGUs in the MPS Group, the Permittee must comply with an overall SO<sub>2</sub> annual emission rate of 0.23 lb/mmBtu.
- c.
  - i Pursuant to 35 IAC 225.233(e) (1) (A) and (e) (3) (B) (iii), for the EGUs in the MPS Group, the Permittee must comply with an overall NO<sub>x</sub> annual emission rate of no more than 0.11 lb/million Btu.
  - ii. Pursuant to 35 IAC 225.233(e) (1) (B) and (e) (3) (B) (i), for the EGUs in the MPS Group, the Permittee must comply with an overall NO<sub>x</sub> seasonal emission rate of no more than 0.11 lb/million Btu.

6.4.4 Monitoring

- a. The Permittee shall install, operate and maintain monitoring systems required pursuant to 35 IAC 225.240 through 225.270 for monitoring mercury mass emissions (including the systems required to monitor mercury concentration, stack gas moisture content, stack gas flow rate, and CO<sub>2</sub> or O<sub>2</sub> concentration, as applicable, in accordance with Sections 1.15 or 1.16 of 35 IAC 225. Appendix B) (State-Only Requirement).
- b. The applicable monitoring requirements for SO<sub>2</sub> and NO<sub>x</sub> emissions from the affected boilers are set forth in Conditions 7.1.8(b) through (d).

6.4.5 Recordkeeping

- a.
  - i. Pursuant to 35 IAC 225.290(a) (2), the Permittee shall maintain records for each month identifying the mercury emission standard in Condition 6.4.3(a) used to demonstrate compliance or that is applicable for the affected EGU and the records, as specified in 35 IAC 225.290(a) (2). (State-Only Requirement).
  - ii. The Permittee shall maintain records of the following data (State-Only Requirement):
    - A. Monthly emissions of mercury from each affected EGU.
    - B. For an affected EGU complying by means of 35 IAC 225.230(d), records of the monthly allowable emissions of mercury from the EGU.
  - iii. The Permittee shall maintain records related to quality assurance activities conducted for emissions monitoring systems pursuant to Section 2.2 of 35 IAC 225. Exhibit B. (State-Only Requirement)

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- iv. The Permittee shall prepare and maintain a Mercury Emissions Monitoring Plan as specified in Section 1.10 of 35 IAC Part 225. Appendix B. (State-Only Requirement)

6.4.6 Reporting

- a. Reporting related to mercury emissions:
  - i. Quarterly Reports. For any affected EGUs using CEMS or excepted monitoring systems at any time during a calendar quarter, the Permittee shall submit quarterly reports and compliance certifications to the Illinois EPA as required by 35 IAC 225.290(b) and (c) (State-Only Requirement).
  - ii. Annual Certification of Compliance. The Permittee shall submit to the Agency an Annual Certification of Compliance with 35 IAC Part 225 Subpart B no later than May 1 of each year, addressing compliance for the previous calendar year, as required by 35 IAC 225.290(d) (State-Only Requirement).
  - iii. Deviation Reports. For each affected EGU, the Permittee shall promptly notify the Agency of deviations from requirements of 35 IAC Part 225 Subpart B, as required by 35 IAC 225.290(e). These notifications must include a description of such deviations within 30 days after discovery of the deviations, and a discussion of the possible cause of such deviations, any corrective actions, and any preventative measures taken (State-Only Requirement).
  - iv. Quality Assurance RATA Reports. The Permittee shall submit to the Agency, Air Compliance and Enforcement Section, the quality assurance RATA report for each EGU or group of EGUs pursuant to Section 1.18(d)(4) of 35 IAC Part 225. Appendix B, within 45 days after completing a quality assurance RATA (State-Only Requirement).
- b.
  - i. Compliance with the NO<sub>x</sub> and SO<sub>2</sub> emission standards must be demonstrated in accordance with 35 IAC 225.310, 225.410, and 225.510. The Permittee of the EGUs in the MPS group must complete the demonstration of compliance pursuant to 35 IAC 225.233(e)(4) before March 1 of the following year for annual standards and before November 30 of the particular year for ozone season control periods (May 1 through September 30) standards, by which date a compliance report must be submitted to the Illinois EPA.

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- A. For the annual period beginning on January 1, 2017 and all annual periods continuing thereafter,
    - I. Compliance with the NO<sub>x</sub> standard in Condition 6.4.3(c)(i), and
    - II. Compliance with the SO<sub>2</sub> standard in Condition 6.4.3(b).
  - B. For the seasonal periods, compliance with the NO<sub>x</sub> standard in Condition 6.4.3(c)(ii).
- ii. Each compliance report shall contain the following information for the applicable reporting period which shall be based on recordkeeping required by the applicable provisions of 40 CFR Part 75 Subparts F, G and H, as set forth in Conditions 7.1.9(d), (e) and (i).
- A. NO<sub>x</sub> and SO<sub>2</sub> average emission rate, (lb/mmBtu) for each individual Power Station in the MPS group and the overall total for the MPS group,
  - B. NO<sub>x</sub> and SO<sub>2</sub> emissions, (tons) for each Power Station in the MPS group,
  - C. Heat input, (mmBtu) for each Power Station in the MPS group,

6.5 Mercury and Air Toxics Standard (MATS) (40 CFR Part 63, Subpart UUUUU)

6.5.1 Description

On December 16, 2011, the United States Environmental Protection Agency (USEPA) signed a rule to limit emissions of hazardous air pollutants from power plants. Specifically, these mercury and air toxics standards (MATS) for power plants limit emissions from new and existing coal and oil-fired electric utility steam generating units (EGUs).

The rule establishes numeric emission standards for non-mercury HAP metals, mercury, and non-organic acid gases. It also establishes surrogate emission standards, including SO<sub>2</sub> (as a surrogate for non-organic acid gases), and filterable PM (as a surrogate for non-mercury HAP metals).

The standards set work practices for emissions of organic HAPs, including dioxin/furan. The work practice standards require periodic tune-ups for each unit that involves inspection, adjustment, and/or maintenance and repairs (if necessary) to ensure efficient combustion.

Note: The description in Condition 6.5.1 is for informational purposes only and implies no limits or constraints.

6.5.2 Applicability Provisions

Certain affected sources, as specified below, are "affected electric utility steam generating units (EGUs)" for the purposes of the National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units, pursuant to 40 CFR 63.9981 and 40 CFR 63.9982(a)(1), because the permittee owns or operates coal fired EGUs as defined at 40 CFR 63.10042. These affected EGUs are subject to the applicable requirements of the NESHAP, 40 CFR Part 63 Subpart UUUUU, and related requirements in the NESHAP General Provisions, 40 CFR Part 63, Subpart A.

Boilers 1 through 6

The affected EGUs are in the subcategory of existing EGUs designed for coal with a heating value greater than or equal to 8300 Btu/lb [40 CFR 63.9990].

6.5.3 Applicable Requirements

- a. Unless an affected EGU complies with the LEE requirements in Condition 6.5.9(b) or alternative requirements in Conditions 6.5.9(c) or (d), the Permittee shall comply with the following applicable requirements:

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- i. For non-mercury HAP metals,
  - A. Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, emissions from the affected EGUs shall comply with one of the following limits:
    - I. Emissions of total non-Hg HAP metals from the affected EGUs shall not exceed, as a 30-group boiler operating day rolling average:
      - a. 0.000050 lb/mmBtu (mass per heat input); or
      - b. 0.50 lb/GWh (mass per gross output).
    - II. As an alternative to the standard in Condition 6.5.3(a)(i)(A)(I), the Permittee may elect to comply with the standard for individual non-mercury HAP metals, or filterable PM, as set forth in Condition 6.5.9(c).
- ii. For mercury,
  - A. Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, for affected EGUs not using emissions averaging, emissions of mercury from the affected EGUs shall not exceed, as a 30-boiler operating day rolling average:
    - I. 1.2 lb/TBtu (mass per heat input); or
    - II. 0.013 lb/GWh (mass per gross output).
  - B. Pursuant to 40 CFR 63.10009(a)(2), if the Permittee is using emissions averaging for mercury, emissions from the affected EGUs shall not exceed, as a 90-group boiler operating day rolling average:
    - I. 1.0 lb/TBtu (mass per heat input); or
    - II. 0.011 lb/GWh (mass per gross output).
- iii. For acid gases,
  - A. Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, emissions from

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the affected EGUs shall comply with one of the following limits:

- I. Emissions of Hydrogen Chloride shall not exceed, as a 30-group boiler operating day rolling average:
    - a. 0.0020 lb/mmBtu (mass per heat input); or
    - b. 0.020 lb/MWh (mass per gross output).
  - II. As an alternative to the standard in Condition 6.5.3(a)(iii)(A)(I), the Permittee may elect to comply with the standard for SO<sub>2</sub> as set forth in Condition 6.5.9(d).
- b. The Permittee may use the emissions averaging provisions of 40 CFR 63.10009 and 40 CFR 63.10022 to demonstrate compliance with the emission standards specified in Conditions 6.5.3(a)(i), (ii)(B), and (iii).
  - c. If the Permittee elects to switch from heat input based limits to gross output based limits (or vice-versa) in Condition 6.5.3(a) or to an alternate emission standard or provision in Conditions 6.5.9(c) through (e), the Permittee shall comply with the Notification of Compliance Status requirements in Condition 6.5.9(a).
  - d. Pursuant to 40 CFR 63.10000(b), at all times the Permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Illinois EPA which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
  - e. Performance Tune-up Work Practices:

Pursuant to 40 CFR 63.9991(a)(1), and item 1 of Table 3 to Subpart UUUUU of 40 CFR Part 63, the Permittee shall conduct a tune-up of the EGU burner and combustion controls at least every 36 calendar months, or each 48 months if neural network combustion optimization

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software is employed, as specified at 40 CFR  
63.10021(e).

6.5.4 Applicable Monitoring and Testing Requirements

- a. Unless an affected unit complies with the LEE requirements in Condition 6.5.9(b) or alternative requirements in Conditions 6.5.9(c) or (d), the Permittee shall comply with the following applicable requirements:

- i. For non-mercury HAP metals,

Pursuant to 40 CFR 63.10000(c)(1)(iv), in order to demonstrate compliance with the total non-Hg HAP metals emission standard specified in Condition 6.5.3(a)(i)(A), the Permittee shall monitor continuous performance through performance testing repeated quarterly.

- ii. For mercury,

The Permittee shall monitor emissions of mercury from affected EGUs using a sorbent trap monitoring system in accordance with 40 CFR 63.10010(g), 40 CFR 63.10020(a) through (d), and Appendix A to 40 CFR Part 63 Subpart UUUUU.

- iii. For Acid Gases,

To demonstrate compliance with the HCl emission limit specified in Condition 6.5.3(a)(iii), if the affected EGU does not use an HCl continuous emission monitoring system (HCl CEMS), the Permittee shall demonstrate continuous compliance through HCl performance testing repeated quarterly.

- iv. For Continuous Monitoring Systems,

A. The Permittee shall comply with the provisions of 40 CFR 63.10010(b), (c) and (d), and 40 CFR 63.10020(a) through (d) regarding CO<sub>2</sub> CEMS, stack gas flow rate monitoring, and stack gas moisture content.

B. Pursuant to 40 CFR 63.10007(f), since the Permittee uses a continuous monitoring system to monitor emissions of mercury, the Permittee may use the diluent cap and default gross output values as specified at 40 CFR 63.10007(f)(1) and (2) in emission rate calculations during startup and shutdown periods.

6.5.5 General Testing Requirements

- a. Pursuant to 63.10021(a), the Permittee shall conduct all performance testing in accordance with the requirements of 40 CFR 63.10007 and item 1 in Table 2, Table 5, and item 4 in Table 7 to Subpart UUUUU of 40 CFR Part 63.

6.5.6 General Recordkeeping Requirements

- a. The Permittee shall keep copies of any information and reports submitted to comply with the requirements of 40 CFR Part 63 Subpart UUUUU, and copies of any performance stack tests, CMS performance evaluations, and compliance demonstrations as specified at 40 CFR 63.10032(a).
- b. The Permittee shall keep records for any CMS as specified at 40 CFR 63.10032(b) and 40 CFR 63.10(c).
- c. The Permittee shall keep records of any monitoring data as specified at 40 CFR 63.10032(c) and 63.10(b)(2)(vii) through (ix).
- d. The Permittee shall keep records of any monthly fuel use, non-hazardous secondary materials combusted, and information for affected EGUs qualifying as LEE units as specified at 40 CFR 63.10032(d).
- e. The Permittee shall keep records for any emissions averaging as specified at 40 CFR 63.10032(e).
- f. The Permittee shall keep records regarding any startup or shutdown periods as specified at 40 CFR 63.10032(f) and (i).
- g. The Permittee shall keep records regarding any equipment malfunctions as specified at 40 CFR 63.10032(g) and (h).
- h. The Permittee shall keep records of any maintenance performed on air pollution control and monitoring equipment as specified at 40 CFR 63.10(b)(2)(iii).
- i. The Permittee shall keep records of any continuous monitoring system malfunctions and inoperative periods as specified at 40 CFR 63.10(b)(2)(vi).
- j. The Permittee shall keep records of any periods of monitored excess emissions as specified at 40 CFR 63.10(c)(7) and (8).

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- k. The Permittee shall keep sorbent trap monitoring systems and other CMS system records as specified in Section 7.1 of Appendix A to 40 CFR Part 63 Subpart UUUUU.
- l. Pursuant to 40 CFR 63.10033 and 40 CFR 63.10(b)(1), the Permittee shall keep any required records on site for at least the first two years, but may be kept off-site after the first two years.

6.5.7 Reporting Requirements

- a. Pursuant to 40 CFR 63.10030(a), the Permittee shall submit the following notifications, as applicable, in accordance with the specified regulatory provision(s):
  - i. Periodic Test Notifications, as specified at 40 CFR 63.7(b), 40 CFR 63.9(e), and 63.10030(d), to be submitted at least 30 days before the test is scheduled to begin.
  - ii. Continuous Monitoring System Performance Evaluation Notices, as specified at 40 CFR 63.8(e).
  - iii. Alternative Monitoring Requests, as specified at 40 CFR 63.8(f)(4).
  - iv. Alternative RATA Requests, as specified at 40 CFR 63.8(f)(6).
  - v. Special Compliance Requirements Notices, as specified at 40 CFR 63.9(d).
  - vi. Additional CMS Notifications, as specified at 40 CFR 63.9(g).
  - vii. Notifications of Compliance Status, as specified at 40 CFR 63.9(h), 40 CFR 63.10030(e) and Condition 6.5.9(a)(i).
- b. Pursuant to 40 CFR 63.10031(b), the Permittee shall submit a Semiannual Compliance Report no later than January 31 and July 31 of each year. Each Semiannual Compliance Report shall contain the information specified at 40 CFR 63.10031(c) through (d) and (g).
  - i. Pursuant to 40 CFR 63.10031(e), the Permittee shall report deviations from the applicable requirements of 40 CFR Part 63 Subpart UUUUU (as defined at 40 CFR 63.10042) in the Semiannual Compliance Report.
- c. Pursuant to 40 CFR 63.10031(f) and 40 CFR 63.10(d)(1) and (2), the Permittee shall submit reports of performance

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tests and CEMS performance evaluations required by 40 CFR Part 63 Subpart UUUUU no later than 60 days after completion.

- d. The Permittee shall comply with any applicable reporting requirements for mercury CEMS and sorbent trap monitoring systems specified at Sections 7.2.1 through 7.2.4 of Appendix A to 40 CFR Part 63 Subpart UUUUU.
- e. Pursuant to Section 7.2.5 of Appendix A to 40 CFR Part 63 Subpart UUUUU, the Permittee shall submit any required mercury CEMS and sorbent trap monitoring system data quarterly within 30 days after the end of each calendar quarter, using the ECMPS Client Tool.
- f. The Permittee shall comply with any applicable reporting requirements for HCl CEMS specified at Sections 11.1 through 11.4 of Appendix B to 40 CFR Part 63 Subpart UUUUU.
- g. Pursuant to Section 11.5 of Appendix B to 40 CFR Part 63 Subpart UUUUU, the Permittee shall submit any required HCl CEMS data quarterly within 30 days after the end of each calendar quarter, using the ECMPS Client Tool.

6.5.8 Startup/Shutdown Provisions

- a. Pursuant to 40 CFR 63.9991(a)(1) and 40 CFR 63.10021(h), the Permittee shall comply with the control device operation, fuel usage, monitoring, recordkeeping, and reporting requirements specified in items 3 and 4 of Table 3 to Subpart UUUUU of 40 CFR Part 63 during startup periods and shutdown periods (as those terms are defined at 40 CFR 63.10042) of the affected EGUs.
  - i. The Permittee has elected to use paragraph (1) of the definition of "startup" in 40 CFR 63.10042, and must therefore operate all CMS during startup and use "clean fuels" as defined at 40 CFR 63.10042 for ignition.
  - ii. Pursuant to 40 CFR 63.10030(e)(8)(iii), the Permittee may switch from paragraph (1) of the definition of "startup" in 40 CFR 63.10042 to paragraph (2) of the definition of "startup" (or vice-versa), provided that the Permittee follows the procedure specified at 40 CFR 63.10030(e)(8)(iii)(A) through (E).
  - iii. Pursuant to 40 CFR 63.10030(e)(8)(i), should the Permittee choose to rely on paragraph (2) of the definition of "startup" in 40 CFR 63.10042 for an

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EGU, the Permittee shall submit a report that identifies EGU and PM control device design characteristics and other information as specified at 40 CFR 63.10030(e)(8)(i)(A) through (K) that shall be prepared, signed, and sealed by a professional engineer licensed in Illinois.

6.5.9 Alternative Requirements

a. Notification Requirements:

Pursuant to Section 39.5(7)(b) of the Act and 40 CFR 63.10030(e)(8)(iii)(A),

- i. If the Permittee elects to change from compliance with a mass per heat input basis emission limit (e. g., lb/mmBtu) to a mass per gross output basis emission limit (e. g., lb/GW-hr), or vice-versa, the Permittee shall comply with the requirements specified at 40 CFR 63.10030(e)(7)(iii)(A) through (C).
- ii. If the Permittee elects to switch from the paragraph (1) definition of startup at 40 CFR 63.10042 to the paragraph (2) definition of startup, or vice-versa, the Permittee shall comply with the requirements specified at 40 CFR 63.10030(e)(8)(iii)(A) through (E).
- iii. If the Permittee elects to change other 40 CFR Part 63 Subpart UUUUU compliance demonstration methods as described by Condition 6.5.9(b) through (e) that renders the compliance demonstration methodology information contained in the most recently-submitted Notification of Compliance Status incorrect, the Permittee shall submit an advance notice to Illinois EPA at least 60 days prior to implementing the change. In the advance notice, the Permittee shall include the information necessary for Illinois EPA to determine the applicable requirements pertaining to the change, and any relevant performance test results necessary to demonstrate compliance with the new method, if applicable. The Permittee shall comply with written directives issued by Illinois EPA in response to such advance notice, and may proceed with implementing the change if not directed otherwise in writing by Illinois EPA within 45 days after submission of the change notice. The Permittee shall also comply with applicable requirements to submit a revised Notification of Compliance Status to Illinois EPA no later than 60 days following the change.

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b. Low Emitting EGU (LEE) Alternative Requirements:

i. LEE Status for mercury (Hg):

An EGU may qualify for LEE status for Hg if the Permittee collects performance test data that meet the requirements of 40 CFR 63.10005(h), and if those data demonstrate:

A. For Hg emissions from an existing EGU, either:

I. Average emissions less than 10 percent of the applicable Hg emissions limit in Table 2 to 40 CFR Part 63 Subpart UUUUU (expressed either in units of lb/TBtu or lb/GWh); or

II. Potential Hg mass emissions of 29.0 or fewer pounds per year and compliance with the applicable Hg emission limit in Table 2 to 40 CFR Part 63 Subpart UUUUU (expressed either in units of lb/TBtu or lb/GWh).

B. If test data demonstrate that an affected EGU qualifies for LEE status for the mercury emission standard specified in Condition 6.5.3(a)(ii) by satisfying the LEE criteria specified at 63.10005(h)(1)(ii), the Permittee shall conduct performance testing as specified at 63.10005(h)(3) at least once every 12 calendar months, as specified at 40 CFR 63.10000(c)(1)(ii).

C. Pursuant to 40 CFR 63.10006(b)(2), if subsequent emission test results show that the affected EGU no longer satisfies the criteria for LEE status, the Permittee shall install, certify, operate, and maintain a mercury CEMS or sorbent trap monitoring system in accordance with Appendix A to 40 CFR Part 63 Subpart UUUUU within 6 months of losing LEE eligibility, and conduct quarterly mercury emissions testing until the mercury CEMS or sorbent trap monitoring system is installed, certified, and operating.

ii. LEE Status for HCl, filterable PM, total non-Hg HAP metals, or individual non-Hg HAP metals:

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An EGU may qualify for LEE status for HCl, filterable PM, total non-Hg HAP metals, or individual non-Hg HAP metals if the Permittee collects performance test data that meet the requirements of 40 CFR 63.10005(h), and if those data demonstrate:

- A. For HCl, filterable PM, total non-Hg HAP metals, or individual non-Hg HAP metals, performance test emissions results less than 50 percent of the applicable emissions limits in Table 2 to 40 CFR Part 63, Subpart UUUUU for all required testing for 3 consecutive years.
  - B. If test data demonstrates that an affected EGU qualifies for LEE status for total non-Hg HAP metals, individual non-Hg HAP metals, filterable particulate matter, or HCl standards specified in Conditions 6.5.3(a)(i)(A)(I), 6.5.9(c)(i)(A)(II), 6.5.9(c)(i)(A)(I), or 6.5.3(a)(iii)(A)(I), respectively, by satisfying the LEE criteria specified at 63.10005(h)(1) and (2), the Permittee shall conduct a performance test at least once every 36 calendar months, as specified at 40 CFR 63.10000(c)(1)(iii).
  - C. Pursuant to 40 CFR 63.10006(b)(1), if subsequent emission test results show that the affected EGU no longer satisfies the criteria for LEE status, the Permittee shall resume conducting quarterly stack testing for total non-Hg HAP metals, individual non-Hg HAP metals, filterable PM, or HCl or shall install, certify, and operate a PM CEMS, HCl CEMS, SO<sub>2</sub> CEMS, or PM CPMS, as applicable.
- c. i. Non-mercury HAP Metals Alternative Requirements:
- A. The Permittee may elect to comply with a filterable PM or individual non-mercury HAP metals standard as an alternative to the total non-mercury HAP metals standard set forth in Condition 6.5.3(a)(i). Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, for affected EGUs not satisfying the criteria for LEE status, the Permittee may elect to comply with one of the following limits either individually or using the applicable emissions averaging provisions of 40 CFR 63.10009 and 63.10022:

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6.5- Mercury and Air Toxics Standard (MATS)

- I. Emissions of filterable PM from the affected EGUs shall not exceed, as a 30-boiler operating day rolling average, 0.030 lb/mmBtu (mass per heat input) or 0.30 lb/MWh (mass per gross output); or
- II. Emissions of individual non-Hg HAP metals (Sb, As, Be, Cd, Cr, Co, Pb, Mn, Ni, Se) shall not exceed, as a 30-boiler operating day rolling average, the following limits specified in Table 2 to Subpart UUUUU of 40 CFR Part 63:

Pollutant:	Emission Limit (Mass Per Heat Input):	OR	Emission Limit (Mass Per Gross Output):
Antimony (Sb)	0.80 lb/TBtu	OR	0.0080 lb/GWh
Arsenic (As)	1.1 lb/TBtu	OR	0.020 lb/GWh
Beryllium (Be)	0.20 lb/TBtu	OR	0.0020 lb/GWh
Cadmium (Cd)	0.30 lb/TBtu	OR	0.0030 lb/GWh
Chromium (Cr)	2.8 lb/TBtu	OR	0.030 lb/GWh
Cobalt (Co)	0.80 lb/TBtu	OR	0.0080 lb/GWh
Lead (Pb)	1.2 lb/TBtu	OR	0.020 lb/GWh
Manganese (Mn)	4.0 lb/TBtu	OR	0.050 lb/GWh
Nickel (Ni)	3.5 lb/TBtu	OR	0.040 lb/GWh
Selenium (Se)	5.0 lb/TBtu	OR	0.060 lb/GWh

ii. Non-mercury HAP Metals Alternative Monitoring Provisions:

- A. If the Permittee elects to demonstrate compliance with the filterable particulate matter emission limit specified in Condition 6.5.9(c) (i) (A) (I) using PM CEMS, the Permittee shall install, certify, operate, and maintain the PM CEMS in accordance with the requirements specified at 40 CFR 63.10010(i) and 40 CFR 63.10020(a) through (d).
- B. If the Permittee elects to demonstrate compliance with the filterable particulate matter emission limit specified in Condition 6.5.9(c) (i) (A) (I) using PM CPMS, the Permittee shall install, certify, operate, and maintain the PM CPMS in accordance with the requirements specified at 40 CFR 63.10010(h) and 40 CFR 63.10020(a) through (d), and Table 6 to 40 CFR Part 63, Subpart UUUUU.

d. i. Acid Gases Alternative Emission Standards:

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A. The Permittee may elect to comply with a standard for emissions of SO<sub>2</sub> as an alternative the HCl standards set forth in Condition 6.5.3(a)(iii)(A) if the Permittee has a system using wet or dry flue gas desulfurization technology and SO<sub>2</sub> continuous emissions monitoring system (CEMS) installed on the unit. Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, for affected EGUs not satisfying the criteria for LEE status, the Permittee may elect to comply with the following limit, either individually or using the applicable emissions averaging provisions of 40 CFR 63.10009 and 63.10022:

I. Emissions of SO<sub>2</sub> shall not exceed, as a 30-boiler operating day rolling average, 0.20 lb/mmBtu (mass per heat input) or 1.5 lb/MWh (mass per gross output).

B. Pursuant to 40 CFR 63.9991(c)(2), if the Permittee is complying with the SO<sub>2</sub> limit in Condition 6.5.9(d)(i)(A)(I), the Permittee must, at all times, operate the wet or dry flue gas desulfurization technology and the SO<sub>2</sub> CEMS installed on the affected units consistent with 40 CFR 63.10000(b).

ii. Acid Gases Alternative Monitoring Provisions:

If the Permittee elects to demonstrate compliance with the HCl emission limit specified in Condition 6.5.3(a)(iii)(A)(I) using an HCl CEMS, the Permittee shall install, certify, operate, and maintain the HCl CEMS in accordance with the requirements specified at 40 CFR 63.10010(e), 40 CFR 63.10020(a) through (d), and Appendix B to 40 CFR Part 63 Subpart UUUUU.

e. Mercury Alternative Monitoring Provisions:

The Permittee may elect to monitor emissions of mercury from affected EGUs using a mercury CEMS monitoring system in accordance with 40 CFR 63.10010(g), 40 CFR 63.10020(a) through (d), and Appendix A to 40 CFR Part 63 Subpart UUUUU, as an alternative to a sorbent trap monitoring system, as described in Condition 6.5.4(a)(ii).

7.0 UNIT SPECIFIC CONDITIONS

7.1 Coal-Fired Boilers

7.1.1 Description

The Permittee operates six coal-fired boilers for electric generation. The boilers, which were built in the 1950's, are identical in size and type, with a nominal capacity of 1800 mmBtu/hour each and pairs of boilers served by a single stack. The boilers also fire natural gas or fuel oil as auxiliary fuel during startup and for flame stabilization. Periodically small amounts of used oil may be fired with the coal in these units. The boilers also have the capability to fire a combination of coal and natural gas. Boilers 1 and 4 further have the capability to fire only natural gas as their principal fuel.

Particulate matter (PM) emissions from the boilers are controlled by electrostatic precipitators (ESP). In addition, the boilers have the capability of operating flue gas conditioning (FGC) systems (SO<sub>3</sub> Injection). Nitrogen oxide (NO<sub>x</sub>) emissions are controlled with low-NO<sub>x</sub> burners and over-fire air (OFA) systems. SO<sub>2</sub> emissions from the boilers are controlled by the use of refined sub-bituminous coal. Mercury emissions from the boilers are controlled by the ESPs and activated carbon injection (ACI) systems which inject a sorbent such as activated carbon into the flue gas of each boiler prior to the ESP.

Note: The description in Condition 7.1.1 is for informational purposes only and implies no limits or constraints.

7.1.2 List of Emission Units and Air Pollution Control Equipment

Boiler Name	Description	Emission Control Equipment	Stack
Boiler 1	Combustion Engineering #16665 Field Constructed 1953 with Low NO <sub>x</sub> Burners	ESP, OFA, FGC and ACI	S1
Boiler 2	Combustion Engineering #16667 Field Constructed 1953 with Low NO <sub>x</sub> Burners	ESP, OFA, FGC and ACI	
Boiler 3	Combustion Engineering #16663 Field Constructed 1954 with Low NO <sub>x</sub> Burners	ESP, OFA, FGC and ACI	S2
Boiler 4	Combustion Engineering #16661 Field Constructed 1954 with Low NO <sub>x</sub> Burners	ESP, OFA, FGC and ACI	
Boiler 5	Combustion Engineering #17415 Field Constructed 1955 with Low NO <sub>x</sub> Burners	ESP, OFA, FGC and ACI	S3

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Boiler Name	Description	Emission Control Equipment	Stack
Boiler 6	Combustion Engineering #17413 Field Constructed 1955 with Low NOx Burners	ESP, OFA, FGC and ACI	

7.1.3 Applicability Provisions

- a. An "affected boiler" for the purpose of these unit-specific conditions, is a boiler described in Conditions 7.1.1 and 7.1.2.

b. Startup Provisions

Subject to the following terms and conditions, the Permittee is authorized to operate an affected boiler in violation of the applicable standards identified or cross-referenced in Condition 5.2.2(b) (35 IAC 212.123), Condition 7.1.4(a) (35 IAC 212.203), and Condition 7.1.4(d) (35 IAC 216.121) during startup. This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262, as the Permittee has applied for such authorization in its application, generally describing the efforts that will be used "...to minimize startup emissions, duration of individual startups and frequency of startups."

- i. This authorization does not relieve the Permittee from the continuing obligation to demonstrate that all reasonable efforts are made to minimize startup emissions, duration of individual startups and frequency of startups.
- ii. The Permittee shall conduct startup of an affected boiler in accordance with written procedures prepared by the Permittee and maintained in the control room for the boiler, that are specifically developed to minimize emissions from startups and that include, at a minimum, the following measures:
- A. Use of auxiliary fuel burners to heat the boiler prior to initiating burning of coal.
- B. Timely energization of the electrostatic precipitator as soon as this may be safely accomplished without damage or risk to personnel or equipment.

- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.1.9(g) and 7.1.10-2(a).
  - iv. As provided by 35 IAC 201.265, an authorization in a permit for excess emissions during startup does not shield a Permittee from enforcement for any violation of applicable emission standard(s) that occurs during startup and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.
- c. Malfunction and Breakdown Provisions

Subject to the following terms and conditions, the Permittee is authorized to continue operation of an affected boiler in violation of the applicable standards identified or cross-referenced in Condition 5.2.2(b) (35 IAC 212.123), Condition 7.1.4(a) (35 IAC 212.203), and Condition 7.1.4(d) (35 IAC 216.121) in the event of a malfunction or breakdown of an affected boiler, including the coal pulverizer, the ash removal system, or the electrostatic precipitator (including flue gas conditioning). This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262, as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to prevent injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.

- i. This authorization only allows such continued operation as necessary to provide essential service or to prevent injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.
- ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable reduce boiler load, repair the affected boiler, remove the affected boiler from service or undertake other action so that excess emissions cease.

- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.1.9(h) and 7.1.10-3(a). For these purposes, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the boiler out of service.
- iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.
- v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

#### 7.1.4 Applicable Emission Standards

- a. The emissions of PM from each affected boiler shall not exceed 0.19 lb/mmBtu of actual heat input in any one hour period, pursuant to 35 IAC 212.203. This standard applies because the affected boilers qualify for the alternative standard provided by this rule, as recognized by the Illinois Pollution Control Board in Regulatory Proceeding R82-1. In particular, in accordance with 35 IAC 212.203(a), as of April 14, 1972, the affected boilers had hourly emission rates based on the stricter of the original design or equipment performance test conditions that were less than 0.20 lb/mmBtu of actual heat input, i.e., 0.14 lb/mmBtu. Thereafter, under this rule, the emission rates are not allowed to degrade by more than 0.05

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lb/mmBtu from the base emission rate, resulting in an emission standard of 0.19 lb/mmBtu.

- b. The total emissions of SO<sub>2</sub> from the affected boilers combined shall not exceed 36,865 lb/hour, which is equal to or less than that allowed by 35 IAC 214.143, 214.182, and 214.184.

The following formula in 35 IAC 214.184 is used to calculate the allowed SO<sub>2</sub> emissions:

$$E = 20,000 (H_s/300)^2$$

$$H = P_1H_1 + P_2H_2 + \dots P_nH_n$$

In these equations, symbols mean the following:

E = Total emissions of SO<sub>2</sub>, in pounds per hour, into the atmosphere in any one hour period from all fuel combustion emission units owned or operated by such person and located within a 1 mile radius from the center point of any such unit\*;

P<sub>i</sub> = (for i=1,2,...,n) Percentage of total emissions E emitted from emission unit i expressed as decimal equivalents (e.g., 12%=0.21)\* (Note: P<sub>1</sub> + P<sub>2</sub> ... P<sub>n</sub> = 1)

H<sub>i</sub> = (for i=1,2,...,n) Physical height (in feet) above grade of stack i. (Note: the height used may not exceed the good engineering practice [GEP] height for such stack\*\*)

\* The six affected boilers represent all the fuel combustion emission units at this source and have identical heat input capacity, so that for the purpose of calculating the allowable SO<sub>2</sub> emission rate, as shown above, it is assumed that each boiler emits 1/6 of the source's total emissions.

\*\* The actual height of the stacks for the affected boilers is 550 ft, but the GEP height is 423, 423 and 430 ft.

- c. The applicable requirements for the opacity of the emission of smoke or other particulate matter from

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the affected boilers are set forth in Condition 5.2.2(b).

- d. The emissions of CO from each affected boiler shall not exceed 200 ppm, corrected to 50 percent excess air, pursuant to 35 IAC 216.121.
- e. The Acid Rain Program applicable requirements for the affected boilers are set forth in Condition 6.2.
- f. The EGUs at the source are each subject to the following requirements related to NO<sub>x</sub> emissions pursuant to 35 IAC Part 217 Subpart V:
  - i. During each ozone control period (May 1 through September 30):
    - A. The emissions of NO<sub>x</sub> from each pair of EGUs shall not exceed 0.25 lb/mmBtu of actual heat input based on an ozone control period average for that EGU, pursuant to 35 IAC 217.706(a), or
    - B. Notwithstanding the requirement in Condition 7.1.4(f)(i)(A), if the Permittee elects to participate in a NO<sub>x</sub> averaging plan pursuant to 35 IAC 217.708(a), the average rate of emissions of NO<sub>x</sub> from the pair of Permittee's EGUs and all other eligible EGUs that are participating in such NO<sub>x</sub> averaging demonstration shall not exceed 0.25 lbs/mmBtu of actual heat input, as averaged for the ozone control period, pursuant to 35 IAC 217.708(a) and (b). For this purpose, eligible EGUs include: (1) EGUs at this source, which are authorized by this permit to participate in a NO<sub>x</sub> averaging demonstration, and (2) any other EGU that is authorized to participate in a NO<sub>x</sub> averaging plan by a CAAPP permit or other federally enforceable permit issued by the Illinois EPA to the owner or operator of that EGU.

Note: Given the emission determination methods specified by 35 IAC 217.710, the emissions of NO<sub>x</sub> for purposes of these standards are generally calculated in accordance with the federal Acid Rain Program and are different from the emissions determined for purposes of the NO<sub>x</sub> Trading Program.

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- ii. If the Permittee elects to have an EGU comply by participation in a NOx averaging demonstration as provided for and authorized above:
  - A. The EGU shall be included in only one NOx averaging demonstration during an ozone control period, pursuant to 35 IAC 217.708(d).
  - B. The NOx averaging demonstration shall only include other EGUs that are authorized through a federally enforceable permit to participate in a NOx averaging demonstration and for which the owner or operator of the EGUs maintains the required records, data and reports and submits copies of such records, data, and reports to the Illinois EPA upon request, pursuant to 35 IAC 217.708(c) and (g).
  - C. The effect of failure of the NOx averaging demonstration to show compliance shall be that the compliance status of the EGU shall be determined pursuant to Condition 7.1.4(f)(i)(A) as if the NOx emission rate of the EGU was not averaged with other EGUs, pursuant to 35 IAC 217.708(f).

Note: The above requirements also apply as a matter of rule to EGUs other than the EGUs if the owner or operator of such EGUs elects to participate in a NOx averaging demonstration.

- g. The Cross-State Air Pollution Rule applicable requirements for the affected boilers are set forth in Condition 6.3.
- h. The 35 IAC 225 Subpart B applicable requirements for the affected boilers are set forth in Condition 6.4.
- i. The Mercury and Air Toxics Standards rule applicable requirements for the affected boilers are set forth in Condition 6.5.

7.1.5 Non-Applicability of Regulations of Concern

- a. Pursuant to Section 39.5(7)(a) of the Act,
  - i. The Permittee is shielded from the following

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rules for an affected boiler when the boiler is using coal (solid fuel) as its principal fuel. This is because incidental use of natural gas or liquid fuel generally serves as a good combustion practice for firing of solid fuel and does not provide a decrease in emissions that can be used to reduce the emission rate that must be achieved for the emissions associated with combustion of solid fuel.

A. 35 IAC 212.207.

B. 35 IAC 214.162.

ii. If an affected boiler is not using coal (solid fuel) as its principal fuel, the affected boiler shall comply with the requirements of the following conditions. During such periods, for PM emissions, Condition 7.1.5(a)(ii)(A), below, shall substitute for Condition 7.1.4(a) and for SO<sub>2</sub> emissions, Condition 7.1.5(a)(ii)(B), below, shall supplement Condition 7.1.4(b).

A. The emissions of PM from the affected boiler in any one-hour period shall not exceed the amount, in lbs/hr, allowed by the formula in 35 IAC 212.207. For this purpose, the applicable PM standard for heat input from liquid fuel shall be 0.1 lb/mmBtu, pursuant to 35 IAC 212.206 and 212.207.

B. The emissions of SO<sub>2</sub> from the affected boiler in any one hour period shall not exceed the amount, in lbs/hr, allowed by the formula in 35 IAC 214.162. For this purpose, the applicable SO<sub>2</sub> standards for heat input shall be:

I. Residual fuel oil: 1.0 lb/mmBtu.  
[35 IAC 214.161(a)(1)]

II. Distillate fuel oil: 0.3 lb/mmBtu.  
[35 IAC 214.161(a)(2)]

III. On and after January 1, 2017, in addition to the standards in Condition 7.1.5(a)(ii)(B)(I) and (II) above:

- a. Residual fuel oil: 0.105  
lb/mmBtu. (State-Only  
Requirement) [35 IAC  
214.162(d) and Section  
39.5(7) (a) of the Act]
  - b. Distillate fuel oil: 0.0015  
lb/mmBtu. (State-Only  
Requirement) [35 IAC  
214.162(d)]
- b. Pursuant to 35 IAC 201.403(a), the Permittee is not subject to the requirements of 35 IAC Part 201 Subpart L for opacity monitoring because the Permittee is conducting opacity monitoring on the affected boilers in accordance with the NSPS, as specified at 40 CFR 75.14 of the federal Acid Rain program.
  - c. The affected boilers are not subject to 40 CFR Part 60 Subpart D, Standards of Performance for Fossil-Fuel Fired Steam Generators because the affected boilers commenced construction prior to the applicability date of August 17, 1971 and were not modified after the applicable date.
  - d. The affected boilers are not subject to 40 CFR Part 60 Subpart Da, Standards of Performance for Electric Utility Steam Generating Units because the affected boilers did not commence construction, modification or reconstruction after September 18, 1978.
  - e. The affected boilers are not subject to 40 CFR Part 60 Subpart CCCC, Standards of Performance for Commercial and Industrial Solid Waste Incineration Units because the affected boilers do not combust any solid waste as that term is defined in 40 CFR part 241.
  - f. The affected boilers are not subject to 40 CFR Part 63 Subpart DDDDD or JJJJJJ, NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters. This is because electric utility steam generating units (EGU) covered by 40 CFR 63 Subpart UUUUU are not subject to 40 CFR 63 Subpart DDDDD or JJJJJJ.
  - g. The affected boilers are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for SO<sub>2</sub> and NO<sub>x</sub> Acid Rain Requirements, pursuant to 40 CFR 64.2(b)(1)(iii), because the affected boilers are subject to Acid Rain Program requirements.

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- h. The affected boilers are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for SO<sub>2</sub> (Conditions 6.4.4(c) and 7.1.4(b)), NO<sub>x</sub> (Conditions 6.4.4(b) and 7.1.4(f)), and mercury (Condition 6.4.4(a)) State Rule Requirements, pursuant to 40 CFR 64.2(b)(1)(vi), because the affected boilers are subject to an emission limitation or standard for which this CAAPP permit specifies a continuous compliance determination method.
- i. The affected boilers are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for CO (Condition 7.1.4(d)) State Rule Requirements because the affected boilers do not use an add-on control device to achieve compliance with an emission limitation or standard.
- j. The affected boilers are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for the emission standards set forth in Section 6.5 for mercury, filterable PM, total non-Hg HAP metals, individual non-Hg HAP metals, or Acid Gases, pursuant to 40 CFR 64.2(b)(1)(i), because the affected boilers are subject to emission limitations or standards proposed by the Administrator after November 15, 1990, i.e. 40 CFR Part 63, Subpart UUUUU.
- k. Pursuant to 35 IAC 217.342(b), the affected boilers are not subject to 35 IAC 217 Subpart M, Electrical Generating Units, because the Permittee is complying with 35 IAC 225 Subpart B through the multi-pollutant standard. (See Condition 6.4.3)

7.1.6 Work Practices, Operational and Production Limits and Emission Limitations

- a.
  - i. As part of its operation and maintenance of the affected boilers, the Permittee shall perform a combustion evaluation on each affected boiler at least semi-annually, pursuant to Section 39.5(7)(d) of the Act. This evaluation shall consist of process measurements of the concentration of CO in the flue gas of the affected boiler, as well as any adjustments and/or corrective measures undertaken for the combustion systems of the affected boilers.
  - ii. In a semi-annual period in which the Permittee conducts a tune-up of the EGU burner and combustion controls as specified in Condition 6.5.3(e), such tune-up shall satisfy the semi-

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annual combustion evaluation requirement in Condition 7.1.6(a) (i) for that period.

- iii. Notwithstanding Condition 7.1.6(a) (i), if an affected boiler is off-line during the last 30 days of the semi-annual period, the Permittee shall perform the combustion evaluation for such period within 30 days of restart of the boiler.
- b. The NOx emissions from the affected boilers shall not exceed 11,506 tons per year and the NOx emissions from affected Boiler 5 shall not exceed 2,976 tons per year. Compliance with these limitations shall be determined from a running total of 12 months of data. [T1]

Note: These limitations were established in Construction Permit 99100060 issued to Midwest Electric Power for installation of natural gas fired combustion turbines at the source. (See Condition 5.1.3)

- c. Pursuant to 35 IAC 214.161(b) (1) and (2) and 214.162, on and after January 1, 2017, if an affected boiler is burning liquid fuel,
  - i. The sulfur content of all residual fuel oil used by the affected boiler must not exceed 1000 ppm. (State-Only Requirement)
  - ii. The sulfur content of all distillate fuel oil used by the affected boiler must not exceed 15 ppm. (State-Only Requirement)

#### 7.1.7 Testing Requirements

- a. Pursuant to Section 39.5(7) (d) (ii) of the Act, the Permittee shall have the PM and CO emissions of the affected boilers measured as specified below:
  - i. PM emission measurements shall be made no later than one year after the effectiveness of this condition.
  - ii. Intentionally Blank
  - iii. Periodic PM emission measurements shall be made for the affected boilers within a time period determined from the compliance margin for the applicable PM emission standard, based on the results of the preceding PM measurement, as follows. For this purpose, the compliance

margin is the extent to which the actual PM emissions as measured are lower than the applicable PM limit. For example, if the measured PM emissions of an affected boiler is 0.1425 lb/mmBtu, the compliance margin for the applicable PM limit, 0.19 lb/mmBtu, would be 25 percent.  $(0.19 - 0.1425 = 0.0475, 0.0475 / 0.19 = 0.25$  or 25 percent)

- A. If the compliance margin is less than 20 percent, within 15 months of the previous measurement.
  - B. If the compliance margin is between 20 and 40 percent, within 27 months of the previous measurement.
  - C. If the compliance margin is greater than 40 percent, within 39 months of the previous measurement.
- iv. Measurements of CO emissions shall be made as follows:
- A. In conjunction with the initial measurements of PM emissions as required above by Condition 7.1.7(a)(i) (unless this PM measurement is conducted prior to the issuance of this permit), if a measurement of CO emissions is not otherwise performed earlier in conjunction with a relative accuracy test audit (RATA) for SO<sub>2</sub> or NO<sub>x</sub> conducted under this permit.
  - B. In conjunction with each subsequent measurement of PM emissions made pursuant to Condition 7.1.7(a)(iii) (or a RATA for SO<sub>2</sub> or NO<sub>x</sub> preceding such measurement), provided, however, that if measured CO emissions are no more than 100 ppm at 50 percent excess air, CO measurements need not be performed with the next PM measurement (or preceding RATA) but shall be performed with the second measurement of PM emissions following the measurement in which CO emissions were no more than 100 ppm (or a RATA preceding that PM measurement).
- v. A. If alternative fuel (i.e., any fuel other than coal, fuel oil, or gas) is greater

than 3.0 percent by weight of the fuel burned in a boiler during a calendar quarter, unless measurements for PM and CO emissions have already been conducted while burning alternative fuel at a percentage that is greater than or equal to the percent of those materials burned in that calendar quarter or at the maximum rate at which the systems that feed alternative fuel to the boiler will be operated, the Permittee shall have measurements of PM and CO emissions from the boiler made during the next calendar quarter in which alternative fuel is burned in the boiler. Notwithstanding Condition 5.9, this condition shall take effect after the first complete quarter following the effectiveness of this condition.

- B. The Permittee shall conduct such measurements while firing the boiler at the lower of the following: (i) at least 1.25 times the percentage of alternative fuel in the calendar quarter that triggered the testing; or (ii) at the maximum rate at which the systems that feed alternative fuel to the boiler will be operated. If the boiler has been burning a mix of alternative fuel materials, the mix of fuel during such measurements shall be approved by the Illinois EPA.
  - C. The Permittee shall repeat such measurements if the percentage of alternative fuel materials burned in a boiler during a quarter is more than the percentage of such material being burned in the boiler when previous emission measurements were conducted.
- vi. Measurements of PM and CO emissions shall be made within 90 days (or such later date set by the Illinois EPA) following a request by the Illinois EPA for such measurements.
- b. i. The Permittee shall operate each affected boiler at maximum normal operating load conditions during each performance test. Maximum normal operating load will be generally between 90 and 110 percent of design capacity but should be representative of unit

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specific normal operations during each test run, pursuant to 39.5(7)(c) and consistent with 40 CFR 63.10007(a)(2). In addition, the Permittee may perform measurements at other operating conditions to evaluate variation in emissions.

- ii. Measurements shall be taken at an appropriate location in the stack associated with each pair of affected boilers or another location in the exhaust ductwork of an individual boiler as approved by the Illinois EPA. If both boilers are operating, the boilers and their associated controls shall be operated in a similar manner while measurements are being performed, so that the results typify both boilers. If the operation of the affected boilers differs significantly, the Permittee may have to perform further measurements or separate measurements for each boiler at the request of the Illinois EPA, in accordance with Condition 7.1.7(a).
- iii. The following Reference Methods and procedures shall be used for these measurements. Refer to 40 CFR 60, Appendix A for USEPA Methods.

Location of Sample Points	Reference Method 1
Gas Flow and Velocity	Reference Method 2
Flue Gas Weight	Reference Method 3
Moisture	Reference Method 4
Particulate Matter (PM)	Reference Method 5
Carbon Monoxide (CO)	Reference Method 10

Other test methods adopted by USEPA may be used in place of the above methods with the approval of the Illinois EPA.

- c. Except for minor deviations in test methods, as defined by 35 IAC 283.130, emission testing shall be conducted in accordance with a test plan prepared by the testing service or the Permittee and submitted to the Illinois EPA for review prior to emission testing, and the conditions, if any, imposed by the Illinois EPA as part of its review and approval of the test plan, pursuant to 35 IAC 283.220 and 283.230.
  - i. The Permittee shall submit this test plan within the time period provided in Condition

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8.6.2 and the test plan shall include the information specified by Condition 8.6.2.

- ii. Notwithstanding the above, as provided by 35 IAC 283.220(d), the Permittee need not submit a test plan for emission testing that will be conducted in accordance with the procedures used for previous tests accepted by the Illinois EPA or the previous test plan submitted to and approved by the Illinois EPA, provided that the Permittee's notification for testing, as required below, contains the information specified by 35 IAC 283.220(d)(1)(A), (B) and (C).
- d. The Permittee shall notify the Illinois EPA prior to conducting emission tests to enable the Illinois EPA to observe testing. Notification for the expected test date shall be submitted a minimum of 30 days prior to the expected date of testing. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual test date. The Illinois EPA may on a case-by case basis accept shorter advance notice if it would not interfere with the Illinois EPA's ability to observe testing.
- e. The Permittee shall submit the Final Report(s) for any required emission testing to the Illinois EPA within 45 days after the test results are compiled and finalized but no later than 120 days after the date of testing. The Final Report shall include the information specified in Condition 8.6.3 and the following information:
  - i. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule.
  - ii. A description of any minor deviations from the test plan, as provided by 35 IAC 283.230(a).
  - iii. Detailed description of operating conditions during testing, including:
    - A. Source(s) of fuel and specifications (ash, sulfur and heat content).
    - B. Boiler operating information, i.e., firing rate of the affected boiler(s) (mmBtu/hr), composition of fuel as burned (ash, sulfur and heat content), and fuel

blending ratio (%), if a blend of fuels is burned.

- C. Combustion system information, i.e., level of excess air in the flue gas, and levels of CO, CO<sub>2</sub> or O<sub>2</sub> in the flue gas.
  - D. Control equipment operating parameters during testing.
  - E. Load during testing (gross megawatt output and steam flow).
  - F. Information on the usage of alternative fuel during testing, if testing was conducted to satisfy Condition 7.1.7(a)(v).
- iv. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.
  - v. The SO<sub>2</sub>, NO<sub>x</sub>, O<sub>2</sub> or CO<sub>2</sub>, (hourly averages) and opacity data (6-minute averages) measured during testing.

#### 7.1.8 Monitoring Requirements

- a. Pursuant to 40 CFR 75.14 and Section 39.5(7)(d)(iii) of the Act, the Permittee shall install, operate, calibrate and maintain continuous monitoring equipment for the measurement of opacity from the affected boilers. For this purpose, "shared" monitoring systems may be operated at locations in the stacks that are common to pairs of affected boilers.
  - i. The Permittee shall operate this equipment in accordance with the general provisions for opacity monitoring systems in 40 CFR 75.10.
  - ii. These monitors shall be the primary basis for reporting of exceedances of Condition 5.2.2(b). (See Conditions 7.1.10-2(a) and 7.1.10-3(a).)
- b. Pursuant to 40 CFR 75.11 and Section 39.5(7)(d)(iii) of the Act, the Permittee shall install, operate, calibrate and maintain continuous emission monitoring systems (CEMS) for the measurement of SO<sub>2</sub> emissions from the affected boilers.

- i. These CEMS shall be used to demonstrate compliance with the limit in Condition 7.1.4(b) based on the average hourly SO<sub>2</sub> emission rate determined from monitored data from three-hour block averaging periods.
- c. Pursuant to 40 CFR 75.12, 35 IAC 217.710(a), and Section 39.5(7)(d)(iii) of the Act, the Permittee shall install, calibrate, maintain and operate CEMS for the measurement of NO<sub>x</sub> emissions from the affected boilers, in accordance with the requirements of 40 CFR 75 Subpart B.
- d. Pursuant to Section 412 of the Clean Air Act and 40 CFR Part 75, the source is required to operate continuous monitors for the affected boilers for various parameters, including SO<sub>2</sub>, NO<sub>x</sub>, volumetric flow and opacity, along with a computerized data acquisition and handling system for collected data. (See also Condition 6.2.3.) To the extent that applicable performance specifications and operating requirements for monitoring under 40 CFR Part 75 are inconsistent with the above requirements for monitoring, the procedures of 40 CFR Part 75 shall take precedence. (See also Condition 8.2.)
- e. Compliance Assurance Monitoring (CAM) Requirements  
  
The affected boilers are subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM for the standard set forth in Condition 7.1.4(a) as addressed in Conditions 7.1.13-1 and 7.1.13-2.
- f. Pursuant to Construction Permit 08020070, the Permittee shall operate and maintain instrumentation for each sorbent injection system for sorbent feed rate or the operational status of the system, e.g., injecting sorbent at a normal rate, injecting sorbent at a less than normal rate, or off. [T1]

7.1.9 Recordkeeping Requirements

- a. Operational Records for the Affected Boilers  
  
Pursuant to Sections 39.5(7)(a) and (e) of the Act, the Permittee shall maintain the following operational records for the affected boilers:
  - i. A. Load (in terms of either gross megawatts output or steam flow) on an hourly basis for each affected boiler.

- B. If the Permittee is relying on data for heat input for purposes of compliance with Condition 7.1.4(a) that is different from that recorded pursuant to the federal Acid Rain Program, records of heat input (mmBtu, on an hourly basis) or the conversion factors that the Permittee relies upon to convert from boiler load as recorded above to hourly heat input.
- ii. Records for each day when an alternative fuel (i.e., a fuel other than coal, gas or oil) was burned, including the estimated amount of each such material burned and the affected boiler(s) in which it was burned.
- iii. Total operating hours (hours/quarter) for each affected boiler and each pair of boilers (i.e., hours in which one or both boilers was operating).
- iv.
  - A. Amount of coal consumed (tons/quarter).
  - B. Amount of each alternative fuel consumed (tons, gallons, cubic feet per quarter, as appropriate).
- v.
  - A. Records of agreements with suppliers of alternative fuel(s), including origin of material, specifications for heat and ash content, and representative data for elemental composition of such material, including mercury and other heavy metals, chlorine and fluorine.
  - B. Records for each load of such fuel(s) received at the source, which shall include date, supplier name, type of fuel and amount (tons).
- vi. Operating records, maintenance and repair records, or other records for each affected boiler documenting the performance of the combustion evaluation required by Condition 7.1.6(a), including the date of the evaluation, the concentrations of CO measured at the start and conclusion of the evaluation, and a description of any adjustments and/or corrective measures undertaken for the combustion systems of the boiler.

- vii. In addition, pursuant to 35 IAC 214.121(b)(2)(C)(i), on and after January 1, 2017, records demonstrating that any fuel oil used by the affected boiler complies with the requirements in Condition 7.1.6(c), such as records from the fuel supplier indicating the sulfur content of the fuel oil. (State-Only Requirement)

b. Records for Control Equipment

Pursuant to Sections 39.5(7)(a) and (e) of the Act, the Permittee shall maintain the following records for the air pollution control equipment on the affected boilers:

i. Maintenance and Repair Record

A maintenance and repair record for each control device, which shall list the activities performed, with date and description. (See also Condition 9.6.1, Control Equipment Maintenance Records.)

ii. Electrostatic Precipitators (ESPs)

When an affected boiler served by an ESP is in operation:

A. The status of each ESP field shall be recorded at least once per shift.

B. The following numerical data shall be recorded at least once per day: (1) Primary voltages and currents; (2) Secondary voltages and currents; and (3) Sparking rates.

iii. Activated Carbon Injection (ACI) System

Pursuant to Construction Permit 08020070:  
[T1]

A. Records of sorbent feed rate or the operational status of the sorbent injection system.

c. Records for Continuous Opacity Monitoring Systems

Pursuant to Section 39.5(7)(e) of the Act, the Permittee shall maintain records for the opacity monitoring system on each pair of affected boilers

required by Condition 7.1.8(a) that shall include the following:

- i. Operating records for each opacity monitoring system, including:
  - A. Opacity measurements (6-minute, one-hour and three-hour block averages).
  - B. Performance testing measurements and evaluations, calibration checks, and other quality assurance/control activities.
  - C. Maintenance and adjustment performed.
  - D. Periods other than performance of quality assurance, calibration, and maintenance, as addressed above, when the monitor was inoperative, with reason.
  - E. Quarterly reports submitted in accordance with Condition 7.1.10-2(d).
- ii. Records to address compliance with Conditions 7.1.4(a) and 5.2.2(b) including:
  - A. Each period when the opacity exceeded 30 percent on a 6-minute block average, with date, time, whether it occurred during startup, malfunction, breakdown, or shutdown, and further explanation of the incident.
  - B. Each three-hour block averaging period when the average opacity of a pair of affected boilers was above 30 percent, with date, time, measured opacity (three-hour block average), operating condition of the boiler(s) affected if during startup, malfunction, breakdown, or shutdown, further description of the incident, and, if other information shows that the PM emissions of the affected boiler(s) exceeded or likely exceeded the limit in Condition 7.1.4(a), a description of that information with explanation.

Note: For purposes of this Condition 7.1.9(c)(ii)(B), a three-hour block average is

the average of three consecutive one-hour block averages.

d. Records for Continuous SO<sub>2</sub> Monitoring Systems

Pursuant to Section 39.5(7)(e) of the Act, the Permittee shall maintain records for the SO<sub>2</sub> CEMS on the affected boilers required by Condition 7.1.8(b) that shall include the following:

- i. Operating records for each SO<sub>2</sub> CEMS, including:
  - A. SO<sub>2</sub> emission data in the units of the applicable standards (lbs/mmBtu).
  - B. Performance testing measurements and evaluations, calibration checks, and other quality assurance/control activities.
  - C. Maintenance and adjustments performed.
  - D. Periods when the SO<sub>2</sub> CEMS was inoperative, with date, time and reason.
  - E. Data reduction information.
  - F. Quarterly reports submitted in accordance with Condition 7.1.10-2(b).
- ii. Records to verify compliance with the limitation of Condition 7.1.4(b), including:
  - A. SO<sub>2</sub> emissions in the terms of the applicable standard (lbs/hour) from the affected boilers on an hourly basis, as derived from the data obtained by the SO<sub>2</sub> CEMS.
  - B. The date and time of any three-hour block averaging period when the total SO<sub>2</sub> emission rate, as recorded above, exceeded 36,865 lbs/hour as allowed by Condition 7.1.4(b), with the calculated SO<sub>2</sub> emission rate. These records shall be prepared from the above records at least quarterly as needed to verify compliance with the limitation of Condition 7.1.4(b).



iii. The Permittee shall record for each hour the information required by 40 CFR 75.57(c) for each affected boiler.

e. Records for Continuous NO<sub>x</sub> Monitoring

Pursuant to Section 39.5(7)(e) of the Act and 35 IAC 217.712 (a), the Permittee shall maintain records for the NO<sub>x</sub> CEMS on the affected boilers required by Condition 7.1.8(c) in accordance with the applicable recordkeeping requirements of 40 CFR 75, that shall include the following:

- i. Operating records for each NO<sub>x</sub> CEMS, including:
  - A. NO<sub>x</sub> emission data in the units of the applicable standards (lbs/mmBtu).
  - B. Performance testing measurements and evaluations, calibration checks, and other quality assurance/control activities.
  - C. Maintenance and adjustments performed.
  - D. Periods when a NO<sub>x</sub> CEMS was inoperative, with date, time and reason.
  - E. Data reduction information.
  - F. Quarterly reports submitted in accordance with Condition 7.1.10-2(c).
- ii. Records to verify compliance with the NO<sub>x</sub> limitation of Conditions 7.1.4(f) and 7.1.6(b) including:
  - A. NO<sub>x</sub> emissions in the terms of the applicable standard (lbs/mmBtu and tons/year) from the affected boilers on an hourly and an annual basis, as derived from the data obtained by the NO<sub>x</sub> CEMS.
- iii. The Permittee shall record the applicable information required by 40 CFR 75.57(d) for NO<sub>x</sub> emissions for each affected boiler.

f. Records for Continuous Monitoring Systems

- i. Monitoring Plans

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- A. Pursuant to 40 CFR 75.53(a)(2), the Permittee shall prepare and maintain a monitoring plan for each continuous emissions or opacity monitoring system. The monitoring plan shall contain sufficient information on the continuous emission or opacity monitoring system to demonstrate that all unit SO<sub>2</sub> emissions, NO<sub>x</sub> emissions, CO<sub>2</sub> emissions, and opacity are monitored and reported.
  - B. Pursuant to 40 CFR 75.53(b), whenever the Permittee makes a replacement, modification, or change in the certified CEMS or continuous opacity monitoring system, including a change in the automated data acquisition and handling system or in the flue gas handling system, that affects information reported in the monitoring plan, then the Permittee shall update the monitoring plan.
  - C. Pursuant to 40 CFR 75.53(e), each monitoring plan shall contain the information specified in 40 CFR 75.53(e)(1) in electronic format and the information specified in 40 CFR 75.53(e)(2) in hardcopy format. Electronic storage of all monitoring plan information, including the hardcopy portions, is permissible provided that a paper copy of the information can be furnished upon request for audit purposes.
- ii. General Recordkeeping Provisions
- A. Pursuant to 40 CFR 75.57(a), the Permittee shall maintain for each affected boiler records of all continuous monitoring system measurements, data, reports, and other information required by 40 CFR Part 75 at the source in a form suitable for inspection for at least three (3) years from the date of each record.
  - B. Pursuant to 40 CFR 75.57(b), the Permittee shall record for each affected boiler hourly information on unit operating time, heat input rate, and load, as specified at 40 CFR 75.57(b)(1) through (7).
- g. Records for Startups of Affected Boilers, pursuant to Section 39.5(7)(b) of the Act

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- i. The Permittee shall maintain written startup procedures for each affected boiler, as required by Condition 7.1.3(b)(ii).
- ii. The Permittee shall maintain the following records related to startups of an affected boiler:
  - A. For all startups on each affected boiler.
    - I. Date, time, and duration of the startup.
    - II. A description of the startup, the reason(s) for the startup, and an indication of whether or not written startup procedures were followed. If any procedures were not followed, the records shall include any departures from established procedures and the reason the procedure could not be followed.
  - B. For each startup of an affected boiler where an exceedance of a relevant standard occurred during startup or the Permittee believes that compliance with the PM standard likely was not maintained during the startup, maintain the following additional records for such startup.
    - I. An explanation of the nature of such exceedance(s), including the qualitative or, if available, quantitative magnitude of such excess emissions.
    - II. A description of the actions taken or to be taken to minimize the magnitude and duration of any excess emissions.
    - III. An explanation whether similar incidents could be prevented in the future and if so, a description of the actions taken or to be taken to prevent similar incidents in the future.
  - C. For each startup when the duration of startup from initial firing of fuel to stable operation of the generating unit

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at load exceeded 12 hours, maintain the following additional records for such startups.

- I. A description of the events that led up to the extended startup duration and reason(s) for the extended startup duration.
- II. The actions taken to minimize emissions and the duration of the startup.
- III. An explanation whether similar incidents might be prevented in the future and if so, the corrective actions taken or to be taken to prevent similar incidents.

h. Records for Continued Operation During Malfunctions and Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7)(a) and (e) of the Act, the Permittee shall maintain the following records related to malfunction and breakdown of the affected boilers:

- i. Maintenance and repair records for the affected boilers that address aspects or components of the boilers for which malfunction or breakdown has resulted in excess emissions, which shall list the activities performed on such aspects or components, with date, description and reason for the activity. In addition, in the maintenance and repair records for control equipment required by Condition 7.1.9(b)(i), the Permittee shall also list the reason for the activities that are performed.
- ii. Records for each incident when operation of an affected boiler continued with excess opacity or emissions during malfunction or breakdown as addressed by Condition 7.1.3(c), that shall include the following information:
  - A. Date, time, duration (i.e., the length of time during which operation continued with excess opacity or emissions until corrective actions were taken or the boiler was taken out of service), and description of the incident.
  - B. The corrective actions used to reduce the

quantity of emissions and to reduce the duration of the incident.

- C. Confirmation of fulfillment of the requirements of Condition 7.1.10-3(a), as applicable, including copies of any follow-up reports submitted pursuant to Condition 7.1.10-3(a) (ii).
- D. If opacity during the incident exceeded the applicable standard, as listed in Condition 5.2.2(b), for two or more hours, emissions exceeded the applicable hourly standard, as listed in Condition 7.1.4(a), or the Permittee believes that compliance with the applicable hourly PM standard, as listed in Condition 7.1.4(a), likely was not maintained:
  - I. A detailed explanation of:
    - (1) why continued operation of the affected boiler was necessary, and
    - (2) the probable cause of the incident.
  - II. The preventative measures that have been or will be taken to prevent similar incidents or reduce their frequency and severity, including any repairs to the affected boilers and associated equipment and any changes to operating and maintenance procedures.
- E. If PM emissions during the incident exceeded an applicable hourly standard, as listed in Condition 7.1.4(a), or the Permittee believes that compliance with the PM standard likely was not maintained, estimates of the magnitude of emissions of PM during the incident, with magnitude estimates on a qualitative or, if available, quantitative basis.
- F. If CO emissions during the incident exceeded an applicable hourly standard, as listed in Condition 7.1.4(d), estimates of the magnitude of emissions of CO during the incident, with magnitude estimated on a

qualitative or, if available, quantitative basis.

i. Records for the Acid Rain Program

Records for the continuous emission monitoring required for affected boilers the Acid Rain Program should be kept by the Permittee in accordance with 40 CFR Part 75, including the General Recordkeeping Provisions; the General Recordkeeping Provisions for Specific Situations, if applicable; and Certification, Quality Assurance and Quality Control Record Provisions. [See Condition 6.2.3]

7.1.10-1 Reporting Requirements - Reporting of Deviations

a. Prompt Reporting of Deviations

For each affected boiler, the Permittee shall promptly notify the Illinois EPA of deviations from permit requirements as specified below. These notifications shall include a description of such deviations, including whether they occurred during startup or malfunction/breakdown, and a discussion of the probable cause of such deviations, any corrective actions taken and any preventative measures taken. [Section 39.5(7)(f)(ii) of the Act]

- i. For those breakdown or malfunction PM or opacity events that require notification and reporting pursuant to Condition 7.1.10-3(a), notification and reporting shall be provided pursuant to Condition 7.1.10-3(a) rather than Condition 7.1.10-2(d).
- ii. Notification with the quarterly or annual reports required by Conditions 7.1.10-2(a) and (e) for deviations from Conditions 5.2.2(b), 7.1.4(a), (b) and (f) and from the requirements of Condition 7.1.8 for emissions monitoring, unless notification and reporting for that deviation is required pursuant to Condition 7.1.10-3(a).
- iii. Notification with the quarterly reports required by Condition 7.1.10-2(a) for deviations from the work practice requirements and recordkeeping requirements.

- iv. In addition, pursuant to 35 IAC 214.121(b)(2)(C)(iii), on and after January 1, 2017, notification within 30 days after discovery of deviations from any of requirements of Condition 7.1.6(c). (State-Only Requirement)

b. Periodic Reporting of Deviations

The quarterly reports required by Condition 7.1.10-2(a) shall include the following information for the affected boilers related to deviations from permit requirements during the quarter. [Section 39.5(7)(f)(i) of the Act]

- i. A listing of all notifications and reports for instances of deviations that have been provided in writing to the Illinois EPA pursuant to Condition 7.1.10-3(a). For this purpose, the Permittee need not resubmit copies of these previous notifications or reports but may elect to supplement such material.
- ii. Detailed information, as required by Condition 7.1.10-1(a)(ii) or (iii), for all other deviations not addressed in the above listing.

7.1.10-2 Reporting Requirements - Periodic Monitoring

a. Quarterly Reports

In place of the semi-annual monitoring reports otherwise required by Condition 8.6.1, the Permittee shall submit quarterly reports to the Illinois EPA pursuant to Sections 39.5(7)(a) and (f) of the Act.

- i. These reports shall include the following information for operation of each affected boiler during the quarter:
  - A. The total operating hours for each affected boiler or each pair of boilers (hours when one or both boilers are burning fuel), as also reported in accordance with 40 CFR Part 75.
  - B. The greatest hourly load achieved by each affected boiler (steam flow or gross megawatts).

- C. A discussion of significant changes in the fuel supply to the affected boilers, if any, including changes in the source of coal, the introduction of new fuel materials other than coal, gas and oil, and changes in the source of such other fuel materials or the maximum rate at which they will be fired.
  - D. A list of the startups of each affected boiler, including the date, duration and description of each startup, accompanied by a copy of the records maintained pursuant to Condition 7.1.9(g)(ii)(C) for each startup for which such records were required.
- ii. These reports shall include the information specified in Conditions 7.1.10-2(b), (c) and (d) for SO<sub>2</sub>, NO<sub>x</sub>, and PM emissions and opacity from the affected boilers during the quarter and for the operation of required continuous monitoring systems during the quarter.
  - iii. A. These reports shall be submitted after the end of every calendar quarter as follows, except as provided for in Condition 7.1.10-2(a)(iii)(B):

Monitoring Period	Submittal Deadline
January - March	May 15
April - June	August 15
July - September	November 15
October - December	February 15

- B. Notwithstanding the above, the first quarterly report required pursuant to this permit shall be submitted in accordance with Condition 5.9(e) and the next three quarterly reports shall be submitted no later than 60 days after the end of each calendar quarter.
- b. Reporting of SO<sub>2</sub> Emissions

Pursuant to Sections 39.5(7)(a) and (f) of the Act, the Permittee shall report the following information for each pair of affected boilers to the Illinois EPA

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with its quarterly reports pursuant to Condition 7.1.10-2(a):

- i. Summary information on the performance of the SO<sub>2</sub> CEMS, including the information for a "Summary Report" specified by 40 CFR 60.7(d). When the SO<sub>2</sub> CEMS was not inoperative, repaired or adjusted, such information shall be stated in the report as specified by 40 CFR 60.7(c)(4).
- ii. If specifically requested by the Illinois EPA or the SO<sub>2</sub> CEMS downtime was more than 5 percent of the total operating time for the associated pair of affected boilers during the quarter: the date and time identifying each period during which the CEMS was inoperative except for zero and span checks and the nature of CEMS repairs or adjustments; and a summary of quality assurance data consistent with 40 CFR Part 75, i.e., the dates and results of the Linearity Test(s) and any Relative Accuracy Test Audit(s) during the quarter, a listing of any days when a required daily calibration was not performed, and the date and duration of any periods when the CEMS was "out-of-control" as addressed by 40 CFR 75.24.
- iii. The following information for each period when SO<sub>2</sub> emissions were in excess of the applicable standard specified in Condition 7.1.4(b)\*. When there were no such exceedances, this shall be stated in the report.
  - A. The starting date and time of the SO<sub>2</sub> excess emissions.
  - B. The duration of the excess emissions.
  - C. The one-hour and three-hour average (lb/hour) for each three-hour block of excess emissions.
  - D. A detailed explanation of the cause of the excess emissions if known, including whether such excess emissions occurred during startup, malfunction or breakdown of the boiler.
  - E. A detailed explanation of any corrective actions taken.

- \* For SO<sub>2</sub> emissions, the averaging period is a three-hour block average, as used to determine compliance with the limitation of Condition 7.1.4(b). The records for excess emissions shall consist of three-hour block emission averages during which the limitation was exceeded.

c. Reporting of NO<sub>x</sub> Emissions

Pursuant to Sections 39.5(7)(a) and (f) of the Act, the Permittee shall report the following information for each pair of affected boilers to the Illinois EPA with its quarterly reports pursuant to Condition 7.1.10-2(a):

- i. Summary information on the performance of the NO<sub>x</sub> CEMS, including the information for a "Summary Report" specified by 40 CFR 60.7(d). When the NO<sub>x</sub> CEMS was not inoperative, repaired or adjusted, such information shall be stated in the report as specified by 40 CFR 60.7(c)(4).
- ii. If specifically requested by the Illinois EPA or the NO<sub>x</sub> CEMS downtime was more than 5 percent of the total operating time for the associated pair of affected boilers during the quarter: the date and time identifying each period during which the CEMS was inoperative except for zero and span checks and the nature of CEMS repairs or adjustments; and a summary of quality assurance data consistent with 40 CFR Part 75, i.e., the dates and results of the Linearity Test(s) and any Relative Accuracy Test Audit(s) during the quarter, a listing of any days when a required daily calibration was not performed, and the date and duration of any periods when the CEMS was "out-of-control" as addressed by 40 CFR 75.24.

d. Reporting of Opacity and PM Emissions

Pursuant to Sections 39.5(7)(b) and (f) of the Act, the Permittee shall report the following information for each pair of affected boilers to the Illinois EPA with its quarterly reports pursuant to Condition 7.1.10-2(a):

- i. Information on the performance of the opacity monitoring system and excess emissions, as required for a "Summary Report" as specified

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by 40 CFR 60.7(d). Additionally, the quarterly report shall also include:

- A. The total operating time of the associated pair of affected boilers; and
  - B. The operating status of the opacity monitoring system, including the dates and times of any periods during which it was inoperative except for zero and span checks.
- ii. When no excess opacity occurred or the continuous opacity monitoring system has not been inoperative, repaired or adjusted, such information shall be stated in the report as specified by 40 CFR 60.7(c) (4).
  - iii. The following information for each period when opacity exceeded 30 percent, based on a 6-minute block average:
    - A. A summary of information for each period of excess opacity that includes:
      - I. The starting date and time of the excess opacity.
      - II. The duration of the excess opacity.
      - III. The magnitude of excess opacity, based on six-minute average opacity, including:
        - a. The percent opacity for each six-minute period in excess of the applicable standard.
        - b. The start time of each six-minute period in excess of the applicable standard.
      - IV. The cause of excess opacity, if known, including whether such excess opacity occurred during startup, malfunction or breakdown of an affected boiler.
      - V. Any corrective actions taken.
      - VI. Identification of any previous report for the incidents during the

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quarter submitted to the Illinois EPA pursuant to Condition 7.1.10-3(a)(ii). For this purpose, the Permittee need not resubmit copies of such report but may elect to supplement such material.

- VII. Information required by Conditions 7.1.9(h)(ii)(A), (B), and (D)(I) for incidents when operation of an affected boiler continued during malfunction or breakdown with excess opacity that are not addressed by individual reports submitted pursuant to Condition 7.1.10-3(a)(ii).

Note: Because the Permittee is reporting in accordance with the requirements of the NSPS, 40 CFR 60.7(c) and (d) for an affected boiler for opacity, pursuant to the federal Acid Rain Program, as included above, the Permittee is not subject to reporting pursuant to 35 IAC 201.405 [35 IAC 201.403(a)].

- iv. The following information for periods when PM emissions were in excess of the limitation in Condition 7.1.4(a). If there were no such periods of excess emissions during the reporting period, the quarterly report shall so state.
- A. A summary of information for each period of excess emissions that includes:
- I. The starting date and time of the excess emissions.
  - II. The duration of the excess emissions.
  - III. The qualitative or, if available, quantitative magnitude of the excess emissions.
  - IV. The means by which the excess emissions were indicated or identified, if other than the level of opacity.

- V. A detailed explanation of the cause of the excess emissions, if known, including whether such excess emissions occurred during startup, malfunction or breakdown.
  - VI. A detailed explanation of the corrective actions and actions taken to lessen the emissions.
- B. Identification of the previous reports for the incidents submitted to the Illinois EPA pursuant to Condition 7.1.10-3(a)(ii), if any. For this purpose, the Permittee need not resubmit copies of such report but may elect to supplement such material.
- v. The following further information related to opacity exceedances or groups of opacity exceedances during the quarter that resulted from the same or similar cause(s):
- A. For opacity exceedances or groups of exceedances with "recurring" cause(s) (i.e., cause(s) that also resulted in exceedances(s) during the previous quarter): an explanation of any particular circumstances or factors during the current quarter that affected the number or magnitude of such exceedances; a discussion of any changes in the corrective actions taken in response to such exceedances during the current quarter as compared to the previous quarter; and a discussion of any additional preventative measures that were taken during the current quarter to reduce the number or magnitude of exceedances.
  - B. For opacity exceedances or groups of exceedances with "new" cause(s) (i.e., cause(s) that did not result in opacity exceedance(s) during the previous quarter): an explanation of the cause(s) or probable cause(s) of such exceedance(s), to the extent known; a discussion of any particular circumstances or factors during the quarter that resulted in such

exceedance(s); the corrective action(s) taken, if any, with explanation of how those action(s) functioned to end the exceedance(s); and a discussion of any preventive measures taken to reduce the number or magnitude of exceedance(s).

- vi. A glossary of specialized technical terms commonly used by the Permittee in its reports pursuant to this Condition 7.1.10-2(d).

e. Reporting of NO<sub>x</sub> Emissions for the Ozone Control Period

The Permittee shall submit a report to the Illinois EPA by November 30 of each year that demonstrates whether the affected boilers have complied with Condition 7.1.4(f), pursuant to 35 IAC 217.712(d) and (e).

- i. If the Permittee is demonstrating compliance on a unit-specific basis with Condition 7.1.4(f)(i)(A), this report shall contain the information specified by 35 IAC 217.712(d) including the heat input and NO<sub>x</sub> emissions of the units for the ozone control period.

- ii. If the Permittee is demonstrating compliance by means of "NO<sub>x</sub> averaging" as authorized by Condition 7.1.4(f)(i)(B), this report shall contain the information specified by 35 IAC 217.712(e) and other related information as follows:

- A. In all cases, for each affected boiler covered by this permit that is participating in a NO<sub>x</sub> averaging demonstration, the Permittee shall report the following:

- I. Identification of the other EGUs that are participating in the demonstration, including identification of the source that is the lead party for the demonstration and that is also taking responsibility for submitting the information required by Condition 7.1.10-2(e)(ii)(B) below.

- II. A statement confirming that the

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unit is eligible to participate in an averaging demonstration, i.e., the unit is included in only one demonstration [35 IAC 217.708(d)] and the Permittee is complying with applicable recordkeeping and reporting requirements for the unit, pursuant to 35 IAC 217.708(c) and (g).

III. The average NOx emission rate for the unit, with calculations and supporting information, as required by 35 IAC 217.712(e) (2) and (3), including the heat input and NOx emissions of the unit for the ozone control period.

IV. A statement whether the unit would show compliance on its own in the absence of averaging.

B. If the Permittee is the lead party for a NOx averaging demonstration that includes units operated by other companies, the Permittee shall report the following:

I. Copies of the information provided by other parties to the lead party for the EGU participating in the demonstration, which include all material required by Condition 7.1.10-2(e) (ii) (A) above (unless or except as this information is provided with the submittal by a person who is a responsible official for the EGU participating in the demonstration).

II. The averaged NOx emission rate for all EGUs participating in the demonstration, with complete supporting calculations, as required by 35 IAC 217.712(e) (1).

III. A statement whether the demonstration shows compliance.

f. Submittal of Supplemental Information Related to NOx Emissions during the Ozone Control Period

The Permittee shall submit copies of any records and

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data required by 35 IAC 217.712 to the Illinois EPA within 30 days after receipt of a written request by the Illinois EPA. [35 IAC 217.712(g)]

g. Acid Rain Program Reporting

Pursuant to Section 412 of the Clean Air Act and 40 CFR Parts 72 and 75, the source is subject to the reporting requirements of 40 CFR Part 75, which includes General Provisions; Notifications; Initial Certification or Recertification Application; Quarterly Reports; and Opacity Reports [See Condition 6.2.4]. Pursuant to Section 39.5(17)(m) of the Act, the designated representative of the source must concurrently submit to the Illinois EPA in the same electronic format specified by the USEPA, the data and information submitted to USEPA on a quarterly basis pursuant to 40 CFR 75.64.

7.1.10-3 Reporting Requirements - Notifications

a. Reporting When Continued Operation Occurred During Malfunctions and Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7)(a) and (f) of the Act, the Permittee shall provide the following notifications and reports to the Illinois EPA, Compliance Section and Regional Office, for incidents when operation of an affected boiler continued with excess emissions or excess opacity during malfunction or breakdown as addressed by Condition 7.1.3(c). These requirements do not apply to such excess emissions, if any, that occur during startup or shutdown of an affected boiler.

- i. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone, facsimile or electronic mail for each incident in which the opacity from an affected boiler exceeds 30 percent for eight or more 6-minute averaging periods within a two-hour period unless the Permittee has begun the shutdown of the affected boiler by such time. (Otherwise, if opacity during an incident only exceeds 30 percent for no more than seven 6-minute averaging periods within a two-hour period, the Permittee need only report the incident in the quarterly report, in accordance with Condition 7.1.10-2(d).)
- ii. Upon conclusion of each incident in which the applicable PM emission standard was exceeded

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or in which an exceedance of the opacity standard is two hours or more in duration, the Permittee shall submit a follow-up report to the Illinois EPA, Compliance Section and Regional Office, within 15 days providing a copy of the records for the incident required by Condition 7.1.9(h) (ii) (A), (B) and (D).

7.1.11 Anticipated Operating Scenarios/Operating Flexibility

The Permittee is authorized to make the following operational changes with respect to each affected boiler without prior notification to the Illinois EPA or revision of this permit, pursuant to Sections 39.5(7)(a) and (l) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements; to properly obtain a construction permit in a timely manner for any activity constituting construction or modification as defined in 35 IAC 201.102 or, as applicable, 40 CFR 52.21(a)(2) or 35 IAC 203.207; and to comply with other legal requirements that apply to such a change:

- a. Operation of additional air pollution control equipment, which is addressed by a separate construction permit.
- b. Burning of coal or a mix of coal from different suppliers.
- c. Burning of the following materials in conjunction with burning of standard fuels, provided that such materials can be accommodated with the existing fuel handling system and the burners in the affected boilers, and such materials do not make up more than 10 percent by weight of the fuel supply to the boiler on a quarterly basis:
  - i. Used oil generated at the source.
  - ii. Alternative fuels that do not constitute waste and were not derived from municipal waste or hazardous waste, provided that such fuels are shipped to the source in homogeneous form prepared for use as fuel. Such alternative fuels include materials such as Traditional Fuels (as defined at 40 CFR 241.2) and non-hazardous secondary materials that are not solid wastes when combusted (as specified at 40 CFR 241.3(b) or 241.4(a)).

Note: Other requirements unrelated to air pollution control may apply to burning of alternative fuels, such as Standards for Management of Used Oil, 35 IAC Part 739.

7.1.12 Compliance Procedures

- a. i. Compliance with the opacity limitation of Condition 5.2.2(b) (30 percent opacity) is addressed by the average opacity calculated from 6-minute periods of opacity measurements from the continuous opacity monitoring systems operated in accordance with the requirements of Condition 7.1.8(a) and the relevant recordkeeping requirements of Condition 7.1.9.
- ii. Notwithstanding Condition 7.1.12(a) (i) above, should the Permittee choose to rely on 35 IAC 212.123(b) to allow opacity greater than 30 percent (6-minute average) from an affected boiler, the Permittee shall do the following:
  - A. Maintain records for each pair of affected boilers of short-term opacity data, that is, either a continuous chart recording of measured opacity, a record of discrete measurements of opacity taken no more than 15 seconds apart, or a record of 1-minute average opacity data determined from four or more data points equally spaced during each minute period, to determine whether opacity from the pair of affected boilers exceeded 30 percent opacity.
  - B. Have the capability to review such short-term opacity data to identify:
    - I. For each pair of affected boilers, any hour in which opacity exceeded 30 percent, and then, for such hour: (1) the duration of opacity in excess of 30 percent; (2) whether opacity ever exceeded 60 percent; and (3) whether the duration of opacity in excess of 30 percent was more than 8 minutes in aggregate.
    - II. For each pair of affected boilers, whether opacity in excess of 30 percent occurred in more than three hours in a 24-hour period.

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III. For all pairs of affected boilers, whether opacity exceeded 30 percent from more than one pair of affected boilers in any hour.

- C. For other emission units at the source, have the ability to review any opacity data required to be collected and kept pursuant to other provisions of this permit and that is representative of such units.
- D. In the reports required by Condition 7.1.10-2(d), confirm that the relevant short-term opacity data shows that the terms of 35 IAC 212.123(b) are satisfied, when 35 IAC 212.123(b) is relied upon.
- E. Notify the Illinois EPA with its next quarterly report if it changes the type of short term opacity data that it is collecting pursuant to Condition 7.1.12(a)(ii)(A) for use in conjunction with reliance on 35 IAC 212.123(b).

Note: Because the affected boilers are ducted to a common stack served by a single opacity monitor, the two affected boilers must be treated as a single emission unit if the Permittee chooses to rely on 35 IAC 212.123(b).

- b. Compliance with the PM emission limitation of Condition 7.1.4(a) is addressed by testing requirements in Condition 7.1.7, continuous opacity monitoring in accordance with Condition 7.1.8(e), and the relevant recordkeeping required by Condition 7.1.9.
- c. Compliance with the SO<sub>2</sub> emission limitation of Condition 7.1.4(b) is addressed by continuous emission monitoring in accordance with Condition 7.1.8(b) and the relevant recordkeeping required by Condition 7.1.9.
- d. Compliance with the CO emission limitation of Condition 7.1.4(d) is addressed by the required work practices in Condition 7.1.6(a), emission testing in accordance with Condition 7.1.7 and the relevant recordkeeping required by Condition 7.1.9.
- e. Compliance with the NO<sub>x</sub> emission limitations of Conditions 7.1.4(e) and (f) and 7.1.6(b) is addressed

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by the continuous emission monitoring in accordance with Condition 7.1.8(c) and the relevant recordkeeping required by Condition 7.1.9.

- f. Compliance with the work practices required by Condition 7.1.6(a) is addressed by the relevant recordkeeping required by Condition 7.1.9.

Note: This condition is included in this permit pursuant to Section 39.5(7) (p) (v) of the Act.

7.1.13-1 Conditional Approval of Compliance Assurance Monitoring Plan

- a. Due to lack of existing unit-specific performance data for PM emissions, the Permittee must conduct PM emissions testing, prior to use of any approved monitoring for purposes of 40 CFR Part 64, Compliance Assurance Monitoring. The Permittee has submitted an application for a CAM Plan that contains the following:
  - i. The indicators to be monitored to satisfy 40 CFR 64.3(a) (1).
  - ii. The process by which these indicators/ranges shall be established.
  - iii. The performance criteria for the monitoring to satisfy 40 CFR 64.3(b), including for the Continuous Opacity Monitoring System (COMS), pursuant to 40 CFR 64.3(d).
  - iv. A justification for the proposed elements of the monitoring and the appropriateness of such elements.
- b. Pursuant to 40 CFR 64.6(b) and (d) and Section 39.5(7) (a) of the Act, the Permittee shall comply with the following with respect to implementation of CAM:
  - i. The Permittee shall comply with the following schedule, which contains appropriate milestones for completing necessary testing for PM emissions, consistent with the requirements in 40 CFR 64.4(e). The approval of this implementation plan and schedule by the Illinois EPA is authorized by 40 CFR 64.4(d) (1) and (e).

Commitment	Timing
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Commitment	Timing
Submit a CAM Testing Protocol to Illinois EPA	At least 30 days prior to CAM Testing.
Complete CAM Testing	Within 120 days of issuance of this permit.
Submit CAM Testing results to Illinois EPA	Within 45 days of completing the testing.
Begin Implementation of Compliance Assurance Monitoring	Within 180 days of issuance of this permit.

- ii. The Permittee shall, in no case later than 60 days following completion of CAM testing, submit an application to the Illinois EPA for a proposed modification to this permit to incorporate information for the opacity value that was derived from testing, thereby addressing all of the requirements of 40 CFR 64.3, 64.4, and 64.5.
- iii. Pursuant to 40 CFR 64.6(b) and Section 39.5(7)(a) of the Act, the Permittee shall promptly notify the Illinois EPA upon start of monitoring in accordance with Condition 7.1.13-2(a) and Table 7.1.13.

7.1.13-2 Compliance Assurance Monitoring Requirements

- a. Pursuant to 40 CFR 64.7(a), the Permittee shall comply with the CAM requirements in Table 7.1.13 below not later than the date specified in Condition 7.1.13-1(b) above.
- b. Pursuant to 40 CFR 64.5(d), upon start of the monitoring in accordance with Condition 7.1.13-2(a), recordkeeping pursuant to Condition 7.1.9(c) (ii) (B) shall be discontinued.
- c. Pursuant to 40 CFR 64.7(a), the Permittee shall comply with the following CAM requirements and the requirements in Condition 7.1.13-2(d) through (g) not later than the date specified in Condition 7.1.13-1(b) above for implementation of compliance assurance monitoring.
  - i. Proper Maintenance and Continued Operation
    - A. Pursuant to 40 CFR 64.7(b), at all times, the Permittee shall maintain the

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monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

- B. Pursuant to 40 CFR 64.7(c), except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit (PSEU) is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 CFR Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The Permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

ii. Response to Excursions

- A. Pursuant to 40 CFR 64.7(d)(1), upon detecting an excursion, the Permittee shall restore operation of the PSEU (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion (other than those caused by excused

startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distributed control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

- B. Pursuant to 40 CFR 64.7(d)(2), determination of whether the Permittee has used acceptable procedures in response to an excursion will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

d. Recordkeeping

Pursuant to 40 CFR 64.9(b)(1), the Permittee shall maintain records of the monitoring data, monitor performance data, corrective actions taken, monitoring equipment maintenance, any written quality improvement plan required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under Conditions 7.1.9(c)(i), 7.1.13-1, or 7.1.13-2 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

e. Reporting

Pursuant to Sections 39.5(7)(b) and (f) of the Act, the Permittee shall submit the following as part of the Quarterly Monitoring Reports required by Condition 7.1.10-2.

- i. Summary information on the number, duration, and cause of excursions, and the corrective actions taken, pursuant to 40 CFR 64.6(c)(3), 40 CFR 64.9(a)(2)(i), and Condition 7.1.10-2(d)(iv), except as otherwise provided in 40 CFR Part 64, including 64.7(d).

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ii. Summary information on the number, duration, and cause for monitoring equipment downtime incidents, other than downtime associated with calibration checks, pursuant to 40 CFR 64.6(c)(3), 40 CFR 64.9(a)(2)(ii), and Condition 7.1.10-2(d)(i) and (ii).

f. Quality Improvement Plans (QIP)

Pursuant to 40 CFR 64.8, based on the results of any future determination made under 40 CFR 64.7(d)(2), the Administrator or the Illinois EPA may require the Permittee to develop and implement a QIP under separate permit action, as appropriate, under Sections 39.5(14), (15), or (16) of the Act.

g. Need for Improved Monitoring

Pursuant to 40 CFR 64.7(e), if the Permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the Illinois EPA within 30 days of identification and, if necessary, submit to the Illinois EPA a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.



Table 7.1.13 - CAM Plan for Boilers 1 Through 6 - 35 IAC 212.203

PSEU Designation:	Boilers 1 Through 6 (3 Common Stacks)
Pollutant:	Particulate Matter (PM) Emissions
Indicator:	Opacity
<b>General Criteria</b>	
The Monitoring Approach Used to Measure the Indicators:	Opacity is measured using transmissometers. The transmissometers measure the opaqueness of the flue gas exhaust using a beam of light that traverses the stack diameter, which generates an electrical signal that is proportional to the opacity.
The Indicator Range Which Provides a Reasonable Assurance of Compliance:	An excursion is defined as an event during which a measured opacity exceeds [ _* ] percent, based on a rolling 3-hour average of COMS data, excluding those events defined as startup, shutdown or malfunction. The opacity indicator level has been established at a level that provides reasonable assurance that particulate matter emissions are in compliance when opacity is equal to or less than the indicator level.
Quality Improvement Plan (QIP) Threshold Levels:	A QIP is not being considered at the time of this CAM Plan submission. Currently, there is no indication of any deficiencies in the monitoring approach selected. The COMS monitoring requirements provide the specific QA/QC procedures for data collection, recordkeeping and reporting for determining "reasonable" assurance of compliance with the applicable PM limitation.
<b>Performance Criteria</b>	
The Specifications for Obtaining Representative Data:	The COMS are installed at representative locations in the exhaust stacks per 40 CFR Part 60, Appendix B, PS-1 requirements.
Verification Procedures to Confirm the Operational Status of the Monitoring:	N/A. The COMS were installed and qualified for use to determine compliance with state opacity standards. Verification Procedures are not necessary.
Quality Assurance and Quality Control (QA/QC) Practices that Ensure the Validity of the Data:	40 CFR Part 60, Appendix B, Performance Specification 1 and 40 CFR Part 75 QA/QC procedures.
The Monitoring Frequency:	Opacity is measured continuously. Opacity data is reduced in accordance with procedures in 40 CFR 60.13.
The Data Collection Procedures That Will Be Used:	The rolling 3-hour average is calculated and reported in the CEM Data Acquisition System. Alarm set points are established to alert operators of problems.
The Data Averaging Period For Determining Whether an Excursion Has Occurred:	Rolling 3-hour average

[ \_\* ] - Indicator values to be determined pursuant to Condition 7.1.13-1(a).

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## 7.2 Coal Handling Equipment

### 7.2.1 Description

The Permittee transfers and stores coal in a series of operations, including railcar and truck unloading, various conveyor belts (with associated hoppers, diverters, and transfer points), storage piles (with stackers and feeders), and storage bunkers. These operations first handle coal, as supplied by the mine and then, after the crushers, coal that has been processed at the source by the coal processing operations (See Section 7.3).

Particulate matter (PM) emissions associated with these operations are controlled by various measures such as the moisture content of the coal, dust suppression, enclosures and covers, fogging and dust extraction devices.

Note: The description in Condition 7.2.1 is for informational purposes only and implies no limits or constraints.

### 7.2.2 List of Emission Units

Coal Rail Car Unloading  
Truck Unloading  
Coal Transfer Conveyors  
Coal Storage Piles  
Coal Storage Bunkers

### 7.2.3 Applicability Provisions

- a. The "affected operations" for the purpose of these unit-specific conditions are the emission units that are used solely for the purpose of transferring coal or other solid fuel from one location to another or for storage of coal or other solid fuel, without changing the size of the fuel, e.g., by crushing or screening, as described in Conditions 7.2.1 and 7.2.2.
- b. Subject to the following terms and conditions, the Permittee is authorized to continue operation of an affected operation in violation of the applicable standards identified or cross-referenced in Condition 5.2.2(b) (35 IAC 212.123) and Condition 7.2.4(c) (35 IAC 212.321(a)) in the event of a malfunction or breakdown of an affected operation. This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262, as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be

required to provide essential service or to prevent injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.

- i. This authorization only allows such continued operation as related to the operation of the coal-fired boilers as necessary to provide essential service or to prevent injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.
- ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable repair the affected operation, remove the affected operation from service or undertake other action so that excess emissions cease.
- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.2.9(e) and 7.2.10(b). For this purpose, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the affected operation out of service.
- iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.
- v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided

that the Permittee has fully complied with all terms and conditions connected with such authorization.

7.2.4 Applicable Emission Standards

- a. The standard that addresses fugitive emissions, as defined by 35 IAC 211.2490, of the affected operations is set forth in Condition 5.2.2(a).
- b. The standard that addresses the opacity of the emission of smoke or other particulate matter from the affected operations is set forth in Condition 5.2.2(b).
- c. The affected processes listed below shall comply with 35 IAC 212.321(a): "no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of [35 IAC 212.321]". Each unit, e.g., each conveyor, shall demonstrate compliance individually. (See also Attachment 1.) [35 IAC 212.321(a)].
  - i. Coal Transfer Conveyors
  - ii. Coal Storage Bunkers
  - iii. Coal Rail Car Unloading
  - iv. Truck Unloading

7.2.5 Non-Applicability of Regulations of Concern

- a. The affected operations listed below are not subject to 35 IAC 212.321 or 212.322 because of the disperse nature of the operations, as generally addressed by 35 IAC 212.323.
  - i. Coal Storage Piles
- b. The affected operations are not subject to NSPS, "Standards of Performance for Coal Preparation and Processing Plants," 40 CFR 60 Subpart Y, because the affected operations were not constructed,

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reconstructed or modified after October 24, 1974, or May 27, 2009, as applicable.

- c. The affected operations are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM because the affected operations do not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

7.2.6 Work Practices and Emission Limitations

- a.
  - i. The Permittee shall implement and maintain the control measures for the affected operations, such as enclosures and covers, the moisture content of the coal, dust suppression, fogging, and dust extraction devices, for emissions of particulate matter to support the periodic monitoring for the applicable requirements in Conditions 7.2.4 and 7.2.6(b), pursuant to Section 39.5(7)(a) of the Act.
  - ii. The control measures implemented and maintained shall be identified and operated in conformance with the "Control Measures Record" required by Condition 7.2.9(b)(i) to satisfy Condition 7.2.6(a)(i), which record is incorporated by reference into this permit by Condition 5.2.8.
- b. The operation and emissions of equipment in the Coal Yard (i.e., the facility at the source that handles and stores the coal from the rail unloading operation prior to processing in the Crusher House) is subject to the following requirements and limits: [T1R]
  - i. The amount of coal handled by the Coal Yard, determined as coal delivered to the source, shall not exceed 1.0 million tons per month and 8.0 million tons per year.
  - ii. The PM emissions of the equipment in the Coal Yard shall not exceed the following limits:
    - A. 0.005 pounds per ton of coal handled.
    - B. 20.0 tons per year, with compliance determined from a running total of 12 consecutive months of data.

- iii Compliance with the emission limits in Condition 7.2.6(b)(ii) shall be determined using appropriate emission factors developed from factors in USEPA's *Compilation of Air Pollutant Emission Factors*, AP-42, or other credible factors from a recognized source.

Note: The above limits addresses the additional conveyors and other changes to the Coal Yard that were addressed by Construction Permit 90070073.

#### 7.2.7 Opacity Observation Requirements

- a. i. The Permittee shall have the opacity of the emissions from the affected operations during representative operating conditions determined by a qualified observer in accordance with Reference Method 9, as further specified below, pursuant to Section 39.5(7)(d) of the Act.
  - A. For each affected operation, observations shall be conducted not later than two years after the effectiveness of this condition.
  - B. Thereafter, for each affected operation, observations shall be conducted every third year.
  - C. Upon written request by the Illinois EPA, such observations shall be conducted for specific affected operation(s) not later than 45 calendar days after the Permittee has received the request or on such later date agreed to by the Illinois EPA.
- ii. The duration of opacity observations for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes of observations (two six-minute averages) are each not greater than 10.0 percent.
- iii. A. For each set of observations required by Conditions 7.2.7(a)(i)(A), (B), and (C), the Permittee shall notify the Illinois EPA at least 7 days in advance of the date of the first observation(s).
  - B. The Permittee shall promptly notify the

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Illinois EPA of any changes in the date  
of the first observation(s).

- iv. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of the observation(s), if Illinois EPA personnel are present.
- v. The Permittee shall submit a written report for these observations not later than 30 days after the date of completion of each set of opacity observations required by Conditions 7.2.7(a)(i)(A), (B), and (C). The report shall include a copy of the current Reference Method 9 certification of each observer and shall identify the observer's current employer. This report shall also include the following for each observation:
  - A. Identification of the affected operation for which observations were conducted.
  - B. Date and time of observations.
  - C. Description of observation condition, including recent weather.
  - D. Description of the operating conditions of the affected operations.
  - E. Raw data.
  - F. Opacity determinations.
  - G. Conclusions.

#### 7.2.8 Inspection Requirements

- a. The Permittee shall perform inspections of the affected operations on at least a monthly basis to confirm compliance with the requirements of Condition 7.2.6(a). If an affected operation is not in use during an inspection, this shall be noted in the inspection record. The records required by Condition 7.2.9(d) for these inspections shall be signed off by supervisory or management personnel. [Sections 39.5(7)(a) and (d) of the Act]
- b. As part of the inspections required by Condition 7.2.8(a), the Permittee shall perform observations of

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the affected operation(s) for visible emissions in accordance with 35 IAC 212.107 to demonstrate compliance with the requirements of Condition 7.2.4(b), unless the Permittee elects to perform Reference Method 9 observations in accordance with Condition 7.2.7(a). These observations may be scheduled so that only a number of affected operations are reviewed during each inspection, provided, however, that all affected operations that are in routine service shall be observed at least once during each calendar year in which it is in use. If visible emissions are observed, the Permittee shall take corrective action within 2 hours to return the status of the operations to no visible emission or shall conduct observations of opacity by Reference Method 9 within one week in accordance with Condition 7.2.7(a). If the Permittee performs Reference Method 9 observations under this Condition 7.2.8(b), such observations are not subject to the notice requirements of Condition 7.2.7(a)(iii) through (v) [Sections 39.5(7)(a) and (d) of the Act].

- c. Pursuant to 39.5(7)(b) and (d) of the Act, the Permittee shall perform a visual survey of the coal storage pile operations as follows:
  - i. Coal storage pile operations shall be visually surveyed at least twice per month between May 1st and November 30th of each calendar year.
  - ii. Coal storage pile operations shall be visually surveyed on at least a monthly basis at all other times during the calendar year.
  - iii. As part of these visual surveys, the Permittee shall perform an observation of the coal storage pile operations for visible emissions in accordance with 35 IAC 212.107 unless the Permittee elects to perform a Reference Method 9 observation. [Sections 39.5(7)(b) and (d) of the Act].
    - A. The overall duration of any observation for visible emissions shall be at least 10 minutes.
    - B. The duration of any Reference Method 9 observation shall be at least 6 minutes.
  - iv. If visible emissions from the coal storage pile are observed going beyond the property boundary or the average opacity of the Reference Method 9



observation is greater than 20% at the storage pile, the Permittee shall take action within 2 hours, if necessary, to ensure that fugitive particulate matter emissions do not exceed 30% opacity.

- v. The Permittee shall maintain records of the following for each visual survey:
  - A. Date and time the visual survey was performed and name(s) of personnel performing the visual survey.
  - B. The observed activity and condition of the coal storage pile, including the presence of any visible emissions and the recent weather conditions.
  - C. A summary of any emission control activities performed on the coal storage pile since the last visual survey.
  - D. A description of any action taken if visible emissions were observed crossing the property boundary, including whether action took place within 2 hours of the observation. The record in this Condition 7.2.8(c)(v)(D) shall be signed off by supervisory or management personnel.

#### 7.2.9 Recordkeeping Requirements

Pursuant to Sections 39.5(7)(a) and (e) of the Act:

- a. The Permittee shall maintain records of the following for the affected operations:
  - i. Maximum operating capacity of each affected operation, (tons/hr).
  - ii. Maintenance and repair record(s) or other records for the air pollution control equipment associated with the affected operations, which record(s) shall list the activities performed on each item of equipment or system, with date and description. (See also Condition 9.6.1, Control Equipment Maintenance Records.)
- b. i. The Permittee shall maintain a record, which shall be kept up to date to reflect any

changes that the Permittee may elect to make, that contains the following for each affected operation for which a control measure(s) must be implemented and maintained pursuant to Condition 7.2.6(a) (i)

- A. The type of emission unit (conveyor, storage pile, etc.) and the Permittee's designation for each emission unit with a description of the emission points on the emission unit;
  - B. Whether the emission unit is considered to be an "affected facility" for purposes of the NSPS, with copies of supporting documentation;
  - C. Description of the primary control measures that are utilized, with a description of the control measure and estimated frequency of application, if not continuous; and
  - D. Description of any secondary control measures that would be used based on circumstances (freezing temperatures, recent rain, dry weather, etc.) with identification of the circumstances in which they would be used and whether they would take the place of or supplement the primary control measures.
- ii. Accompanying this record, the Permittee shall maintain a demonstration that confirms that the control measures identified in the record required by Condition 7.2.9(b) (i) are sufficient to assure compliance with Condition 7.2.4(c) at the maximum process weight rate at which each affected operations can be operated (tons coal/hour) and the emission limitations in Condition 7.2.6(b) (ii) (1b PM/ton and ton PM/yr), with supporting emission calculations and documentation for the emission factors and the efficiency of the control measures being relied upon by the Permittee. This demonstration shall include the information addressed by Condition 7.2.9(a), emission factors for uncontrolled PM emissions, and/or controlled PM emissions published by USEPA or other credible sources.

- iii. Any subsequent revisions to this record related to control measures or affected operations, including their method of operation, shall be submitted not later than 30 days after the date of the revision. Upon request by the Illinois EPA, the Permittee shall submit other relevant information related to the control measures.
- c. The Permittee shall maintain the following operating records:
  - i. The Permittee shall maintain a record of the amount of coal and other solid fuels received at the source, by type of fuel (tons/month).
- d. The Permittee shall maintain records of the following for the inspections required by Condition 7.2.8:
  - i. Date and time the inspection was performed, name(s) of inspection personnel, and specific affected operation(s) inspected.
  - ii. The observed condition of the control measures identified in the record required by Condition 7.2.9(b) (i) for each inspected affected operation, including the presence of any visible emissions or atypical accumulations of coal fines in the vicinity of the operations.
  - iii. A description of any maintenance or repair of equipment associated with the control measures identified in the record required by Condition 7.2.9(b) (i) that is recommended as a result of the inspection, and associated work order ticket number(s).
  - iv. A description of any corrective action taken if visible emissions were observed, including whether corrective action took place within 2 hours of the observation and whether the status of the process returned to no visible emissions.
- e. The Permittee shall maintain records of the following for each incident when any affected operation was in use without the control measure(s) required pursuant to the record required by Condition 7.2.9(b) (i) and

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each incident when an affected operation continued to operate during malfunction or breakdown with excess emissions or excess opacity as addressed by Condition 7.2.3(b):

- i. The date of the incident and identification of the affected operation(s) that was involved.
  - ii. A description of the incident, including the control measures that were not present or operated as required by the record identified in Condition 7.2.9(b)(i); other control measures that were operated, if any; the measures taken to minimize and correct deficiencies with chronology; and an explanation whether the emissions or opacity during the incident exceeded any applicable emission or opacity standard, as listed in Condition 7.2.4.
  - iii. The time at and means by which the incident was identified, e.g., scheduled inspection or observation by operating personnel.
  - iv. The length of time after the incident was identified that the affected operations continued to operate before the control measures identified in the record required by Condition 7.2.9(b)(i) were in place or the operations were shut down (to resume operation only after such control measures were in place); an explanation of why continued operation was necessary; and, if this time was more than one hour, an explanation of why this time was not shorter, including a description of any mitigation measures that were implemented during the incident.
  - v. The estimated total duration of the incident, i.e., the total length of time that the affected operations ran without the control measure(s) required pursuant to the record required by Condition 7.2.9(b)(i) and the estimated amount of coal handled during the incident.
  - vi. A discussion of the probable cause of the incident and any preventative measures taken.
- f. The Permittee shall keep records for all opacity observations made in accordance with Reference Method

9 for the affected operations that it conducts or that are conducted at its behest by individuals who are qualified to make such observations. For each occasion on which such observations are made, these records shall include the formal report for the observations if conducted pursuant to Condition 7.2.7(a), or otherwise the identity of the observer, a description of the observations that were made, the operating condition of the affected operations, the observed opacity, and copies of the raw data sheets for the observations, and the reason for the opacity observations, e.g., Reference Method 9 opacity observations required by Condition 7.2.7(a) (i), written request by the Illinois EPA, or any required Reference Method 9 opacity observations following observations of visible emissions under Condition 7.2.8(b).

- g. To demonstrate compliance with Condition 7.2.6(b), the Permittee shall keep records of actual PM emissions (tons/month and tons/year), based on the records required by Condition 7.2.9(b) (ii) and 7.2.9(c).

#### 7.2.10 Reporting Requirements

##### a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA of deviations from permit requirements for the affected operations, as follows. Such notifications shall include a description of each deviation and a discussion of the probable cause of deviation, any corrective actions taken, and any preventative measures taken, pursuant to Section 39.5(7) (f) (ii) of the Act.

- i. For those breakdown or malfunction opacity events that require notification and reporting pursuant to Condition 7.2.10(b) (i), notification and reporting shall be provided pursuant to Condition 7.2.10(b) (i) rather than 7.2.10(a).
- ii. Within 30 days after the conclusion of an incident in which the Permittee continued to operate an affected operation for more than 12 operating hours after discovering that emission control measures required by the record identified in Condition 7.2.9(b) (i) were not present or operating, the Permittee shall submit written notice to the Illinois

EPA. Such notifications shall be accompanied by a copy of the records for the incident required by Condition 7.2.9(e).

- iii. A. Except for events and incidents for which notification or reporting is required by Condition 7.2.10(a)(ii) or 7.2.10(b)(i), as referenced in 7.2.10(a)(i), all other notifications shall be submitted with the quarterly reports required by Condition 7.2.10(b)(ii).
  - B. With the quarterly report, the Permittee shall also address deviations that occurred during the quarter that have been separately reported to the Illinois EPA, with a summary of such deviations. For this purpose, the Permittee need not resubmit the detailed information provided in prior notifications and reports for such deviations.
- b. Reporting When Continued Operation Occurred During Malfunctions and Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7)(a) and (f) of the Act, the Permittee shall provide the following notifications and reports to the Illinois EPA for incidents when operation of affected operation(s) continued with excess emissions or excess opacity during malfunction or breakdown as addressed by Condition 7.2.3(b).

- i. A. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone, facsimile or electronic mail, for each incident in which the opacity from an affected operation exceeds 30 percent for eight or more 6-minute averaging periods within a two hour period unless the Permittee has begun the shutdown by such time. (Otherwise, if opacity during an incident only exceeds 30 percent for no more than seven 6-minute averaging periods, the Permittee need only report the incident in the quarterly report, in accordance with Condition 7.2.10(b)(ii).)
- B. Upon conclusion of each incident that is two hours or more in duration, the Permittee shall submit a written follow-

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up notice to the Illinois EPA, Compliance Section and Regional Office, within 15 days providing a copy of the records for the incident required by Condition 7.2.9(e).

- ii. The Permittee shall submit quarterly reports to the Illinois EPA that include the following information for incidents during the quarter in which affected operations continued to operate during malfunction or breakdown with excess emissions or excess opacity. These reports shall be submitted with the quarterly reports submitted for the coal-fired boiler pursuant to Condition 7.1.10-2(a).
  - A. A listing of such incidents, in chronological order, that includes:
    - I. The date, time, and duration of each incident;
    - II. The identity of the affected operation(s) involved in the incident; and
    - III. Whether a follow-up notice was submitted for the incident pursuant to Condition 7.2.10(b) (i) (B), with the date of the notice.
  - B. A description of the incident, discussion of probable cause of the incident, corrective actions taken, and any preventative measures taken; provided, however, that the Permittee need not resubmit information provided in a prior report for an incident, as identified above, but may elect to supplement the prior submittal.
  - C. The sum duration of all incidents during the quarter.
  - D. If there have been no such incidents during the calendar quarter, this shall be stated in the report.

#### 7.2.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational changes with respect to the

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affected operations without prior notification to the Illinois EPA or revision of this permit, pursuant to Sections 39.5(7)(a) and (1) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity constituting a modification as defined by 40 CFR 52.21 or 35 IAC 203.207, as applicable, or for an activity for which a permit is required pursuant to 35 IAC 201.142.

- a. Handling of solid fuels other than coal.
- b. Operation of additional dust suppressant systems.
- c. Operation of additional dust collection equipment.
- d. Operation of replacement dust suppression systems or dust collection equipment that is of equal or greater effectiveness in controlling visible emissions than the device(s) being replaced, as recognized in a Construction Permit for such system or equipment.

7.2.12 Compliance Procedures

- a. Compliance with Condition 7.2.4 is addressed by the observations, testing, inspection, and recordkeeping required by Conditions 7.2.7, 7.2.8, and 7.2.9, respectively.
- b. Compliance with Condition 7.2.6 is addressed by the inspections, and recordkeeping required by Conditions 7.2.8 and 7.2.9, respectively.

Note: This condition is included in this permit pursuant to Section 39.5(7)(p)(v) of the Act.



### 7.3 Coal Processing Equipment

#### 7.3.1 Description

The Permittee prepares or processes coal for use as fuel in its boilers with screens and crushers that reduce the size of the coal. Associated particulate matter (PM) emissions are controlled by various control measures such as enclosures and covers, dust suppression, moisture content and fogging.

Note: The description in Condition 7.3.1 is for informational purposes only and implies no limits or constraints.

#### 7.3.2 List of Emission Units and Air Pollution Control Equipment

Equipment Name	Description	Emission Control Equipment/Measures
Crushers 1, 2 and 3	Coal Crushing Operation	Enclosures and covers, dust suppression, moisture content and fogging

#### 7.3.3 Applicability Provisions

- a. An "affected process" for the purpose of these unit-specific conditions is an individual process emission unit that prepares coal for use as a fuel by crushing the coal as described in Conditions 7.3.1 and 7.3.2.
- b. Subject to the following terms and conditions, the Permittee is authorized to continue operation of an affected process in violation of the applicable standards identified or cross-referenced in Condition 5.2.2(b) (35 IAC 212.123) and Condition 7.3.4(c) (35 IAC 212.322) in the event of a malfunction or breakdown of an affected process. This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262, as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to prevent injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.

- i. This authorization only allows such continued operation as related to the operation of the coal-fired boilers as necessary to provide essential service or to prevent injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.
- ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable repair the affected process, remove the affected process from service or undertake other actions so that excess emissions cease.
- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.3.9(d) and 7.3.10(b). For these purposes, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the affected process out of service.
- iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.
- v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

#### 7.3.4 Applicable Emission Standards

- a. The standard that addresses fugitive emissions, as defined by 35 IAC 211.2490, of the affected processes is set forth in Condition 5.2.2(a).

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- b. The standard that addresses the opacity of the emission of smoke or other particulate matter from the affected processes is set forth in Condition 5.2.2(b).
- c. The affected processes shall comply with 35 IAC 212.322: "no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in subsection (c) of [35 IAC 212.322(b)]". (See also Attachment 2) [35 IAC 212.322(a)] For this purpose, each unit, i.e. each coal crusher, shall demonstrate compliance individually.

7.3.5 Non-Applicability of Regulations of Concern

- a. The affected processes are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM because the affected operations do not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.
- b. The affected processes are not subject to NSPS, "Standards of Performance for Coal Preparation and Processing Plants," 40 CFR 60 Subpart Y, because the affected processes were not constructed, reconstructed or modified after October 24, 1974, or May 27, 2009, as applicable.

7.3.6 Work Practices

- a.
  - i. The Permittee shall implement and maintain the control measures for the affected processes, such as enclosures and covers, dust suppression, moisture content and fogging for emissions of particulate matter to support the periodic monitoring for the applicable requirements in Condition 7.3.4, pursuant to Section 39.5(7)(a) of the Act.
  - ii. The control measures implemented and maintained shall be identified and operated in conformance with the "Control Measures Record" required by Condition 7.3.9(b)(i) to satisfy Condition 7.3.6(a)(i), which record is

incorporated by reference into this permit by Condition 5.2.8.

7.3.7 Opacity Observation Requirements

- a. i. The Permittee shall have the opacity of the emissions from the affected processes during representative operating conditions determined by a qualified observer in accordance with Reference Method 9, as further specified below, pursuant to Section 39.5(7)(d) of the Act.
  - A. For each affected process, observations shall be conducted not later than two years after the effectiveness of this condition.
  - B. Thereafter, for each affected process, observations shall be conducted every third year.
  - C. Upon written request by the Illinois EPA, such observations shall be conducted for specific affected process(es) not later than 45 calendar days after the Permittee received the request or on such later date agreed to by the Illinois EPA.
- ii. The duration of opacity observations for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes of observations (two six-minute averages) are each not greater than 10.0 percent.
- iii. A. For each set of observations required by Conditions 7.3.7(a)(i)(A), (B), and (C), the Permittee shall notify the Illinois EPA at least 7 days in advance of the date of the first observation(s).
  - B. The Permittee shall promptly notify the Illinois EPA of any changes in the date of the first observation(s).
- iv. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of the observation(s), if Illinois EPA personnel are present.

- v. The Permittee shall submit a written report for these observations not later than 30 days after the date of completion of each set of opacity observations required by Conditions 7.3.7(a)(i)(A), (B), and (C). The report shall include a copy of the current Reference Method 9 certification of each observer and shall identify the observer's current employer. This report shall also include the following for each observation:
  - A. Identification of the affected process for which observations were conducted.
  - B. Date and time of observations.
  - C. Description of observation conditions, including recent weather.
  - D. Description of the operating conditions of the affected processes.
  - E. Raw data.
  - F. Opacity determinations.
  - G. Conclusions.

7.3.8 Inspection Requirements

- a. The Permittee shall perform inspections of the affected processes on at least a monthly basis to confirm compliance with the requirements of Condition 7.3.6(a). If an affected process is not in operation during an inspection, this shall be noted in the inspection record. The records required by Condition 7.3.9(c) for these inspections shall be signed off by supervisory or management personnel [Sections 39.5(7)(a) and (d) of the Act].
- b. As part of the inspections required by Condition 7.3.8(a), the Permittee shall perform observations of the affected processes for visible emissions in accordance with 35 IAC 212.107 to demonstrate compliance with the requirements of Condition 7.3.4(b), unless the Permittee elects to perform Reference Method 9 observations in accordance with Condition 7.3.7(a). These observations may be scheduled so that only a number of affected processes are reviewed during each inspection, provided, however, that all affected processes that are in

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routine service shall be observed at least once during each calendar year in which it is operating. If visible emissions are observed, the Permittee shall take corrective action within 2 hours to return the status of the process to no visible emission or shall conduct observations of opacity by Reference Method 9 within one week in accordance with Condition 7.3.7(a). If the Permittee performs Reference Method 9 observations under this Condition 7.3.8(b), such observations are not subject to the notice requirements of Condition 7.3.7(a)(iii) through (v) [Sections 39.5(7) (a) and (d) of the Act].

#### 7.3.9 Recordkeeping Requirements

Pursuant to Sections 39.5(7) (a) and (e) of the Act:

- a. The Permittee shall maintain records of the following for the affected processes:
  - i. Maximum operating capacity of each affected process (tons/hr).
  - ii. Maintenance and repair record(s) or other records for the air pollution control equipment associated with the affected processes, which record(s) shall list the activities performed on each item of equipment or system, with date and description. (See also Condition 9.6.1, Control Equipment Maintenance Records.)
- b.
  - i. The Permittee shall maintain a record, which shall be kept up to date to reflect any changes that the Permittee may elect to make, that contains the following for each affected process for which a control measure(s) must be implemented and maintained pursuant to Condition 7.3.6(a)(i).
    - A. The type of emission unit (crushers, etc.) and the Permittee's designation for each emission unit with a description of the emission points on the emission unit;
    - B. Whether the emission unit is considered to be an "affected facility" for purposes of the NSPS, with copies of supporting documentation;

- C. Description of the primary control measures that are utilized, with a description of the control measure and estimated frequency of application, if not continuous; and
  - D. Description of any secondary control measures that would be used based on circumstances (freezing temperatures, recent rain, dry weather, etc.) with identification of the circumstances in which they would be used and whether they would take the place of or supplement the primary control measures.
- ii. Accompanying this record, the Permittee shall maintain a demonstration that confirms that the control measures identified in the record required by Condition 7.3.9(b) (i) are sufficient to assure compliance with Condition 7.3.4(c) at the maximum process weight rate at which each affected process can be operated (tons coal/hour), with supporting emission calculations and documentation for the emission factors and the efficiency of the control measures being relied upon by the Permittee. This demonstration shall include the information addressed by Condition 7.3.9(a), emission factors for uncontrolled PM emissions, and/or controlled PM emissions published by USEPA or other credible sources.
  - iii. Any subsequent revisions to this record related to control measures or affected processes, including their method of operation, shall be submitted not later than 30 days after the date of the revision. Upon request by the Illinois EPA, the Permittee shall submit other relevant information related to the control measures.
- c. The Permittee shall maintain records of the following for the inspections required by Condition 7.3.8:
    - i. Date and time the inspection was performed, name(s) of inspection personnel, and specific affected process(es) inspected.
    - ii. The observed condition of the control measures identified in the record required by Condition 7.3.9(b) (i), for each inspected affected

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- process(es), including the presence of any visible emissions or atypical accumulations of coal fines in the vicinity of the process.
- iii. A description of any maintenance or repair of equipment associated with control measures identified in the record required by Condition 7.3.9(b) (i) that is recommended as a result of the inspection and associated work order ticket number(s).
  - iv. A description of any corrective action taken if visible emissions were observed, including whether corrective action took place within 2 hours of the observation and whether the status of the process returned to no visible emissions.
- d. The Permittee shall maintain records of the following for each incident when any affected process operated without the control measure(s) required pursuant to the record required by Condition 7.3.9(b) (i) and each incident when an affected process continued to operate during malfunction or breakdown with excess emissions or excess opacity as addressed by Condition 7.3.3(b):
- i. The date of the incident and identification of the affected process(es) that was involved.
  - ii. A description of the incident, including the control measures that were not present or operated as required by the record identified in Condition 7.3.9(b) (i); other control measures that were operated, if any; the measures taken to minimize and correct deficiencies with chronology; and an explanation whether the emissions or opacity during the incident exceeded any applicable emission or opacity standard, as listed in Condition 7.3.4.
  - iii. The time at and means by which the incident was identified, e.g., scheduled inspection or observation by operating personnel.
  - iv. The length of time after the incident was identified that the affected processes continued to operate before the control measures identified in the record required by Condition 7.3.9(b) (i) were in place or the processes were shut down (to resume operation



only after such control measures were in place); an explanation of why continued operation was necessary; and, if this time was more than one hour, an explanation of why this time was not shorter, including a description of any mitigation measures that were implemented during the incident.

- v. The estimated total duration of the incident, i.e., the total length of time that the affected processes ran without the control measure(s) required pursuant to the record required by Condition 7.3.9(b)(i) and the estimated amount of coal handled during the incident.
  - vi. A discussion of the probable cause of the incident and any preventative measures taken.
- e. The Permittee shall keep records for all opacity observations made in accordance with Reference Method 9 for the affected processes that it conducts or that are conducted at its behest by individuals who are qualified to make such observations. For each occasion on which such observations are made, these records shall include the formal report for the observations if conducted pursuant to Condition 7.3.7(a) or otherwise the identity of the observer, a description of the observations that were made, the operating condition of the affected process(es), the observed opacity, copies of the raw data sheets for the observations, and the reason for the opacity observations, e.g., Reference Method 9 opacity observations required by Condition 7.3.7(a)(i), written request by the Illinois EPA, or any required Reference Method 9 opacity observations following observations of visible emissions under Condition 7.3.8(b).

#### 7.3.10 Reporting Requirements

##### a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA of deviations from permit requirements for the affected processes, as follows. Such notifications shall include a description of each deviation and a discussion of the probable cause of deviation, any corrective actions taken, and any preventative measures taken, pursuant to Section 39.5(7)(f)(ii) of the Act.

- i. For those breakdown or malfunction opacity events that require notification and reporting pursuant to Condition 7.3.10(b) (i), notification and reporting shall be provided pursuant to Condition 7.3.10(b) (i) rather than 7.3.10(a).
- ii. Within 30 days after the conclusion of an incident in which the Permittee continued to operate an affected process for more than 12 operating hours after discovering that emission control measures required by the record identified in Condition 7.3.9(b) (i) were not present or operating, the Permittee shall submit written notice to the Illinois EPA. Such notifications shall be accompanied by a copy of the records for the incident required by Condition 7.3.9(d).
- iii. A. Except for events and incidents for which notification or reporting is required by Condition 7.3.10(a) (ii) or 7.3.10(b) (i), as referenced in 7.3.10(a) (i), all other notifications shall be submitted with the quarterly reports required by Condition 7.3.10(b) (ii).  
  
B. With the quarterly report, the Permittee shall also address deviations that occurred during the quarter that have been separately reported to the Illinois EPA, with a summary of such deviations. For this purpose, the Permittee need not resubmit the detailed information provided in prior notifications and reports for such deviations.
- b. Reporting When Continued Operation Occurred During Malfunctions and Breakdowns  
  
Pursuant to 35 IAC 201.263 and Sections 39.5(7) (a) and (f) of the Act, the Permittee shall provide the following notifications and reports to the Illinois EPA for incidents when operation of affected operation(s) continued with excess emissions or excess opacity during malfunction or breakdown as addressed by Condition 7.3.3(b).  
  
i. A. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone, facsimile or electronic mail, for each incident in which the opacity

from an affected operation exceeds 30 percent for eight or more 6-minute averaging periods within a two hour period unless the Permittee has begun the shutdown by such time. (Otherwise, if opacity during an incident only exceeds 30 percent for no more than seven 6-minute averaging periods, the Permittee need only report the incident in the quarterly report, in accordance with Condition 7.3.10(b) (ii).)

- B. Upon conclusion of each incident that is two hours or more in duration, the Permittee shall submit a written follow-up notice to the Illinois EPA, Compliance Section and Regional Office, within 15 days providing a copy of the records for the incident required by Condition 7.3.9(d).
- ii. The Permittee shall submit quarterly reports to the Illinois EPA that include the following information for incidents during the quarter in which affected operations continued to operate during malfunction or breakdown with excess emissions or excess opacity. These reports shall be submitted with the quarterly reports submitted for the coal-fired boiler pursuant to Condition 7.1.10-2(a).
    - A. A listing of such incidents, in chronological order, that includes:
      - I. The date, time, and duration of each incident;
      - II. The identity of the affected operation(s) involved in the incident; and
      - III. Whether a follow-up notice was submitted for the incident pursuant to Condition 7.3.10(b) (i) (B), with the date of the notice.
    - B. A description of the incident, discussion of probable cause of the incident, corrective actions taken, and any preventative measures taken; provided, however, that the Permittee need not resubmit information provided in a prior

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report for an incident, as identified above, but may elect to supplement the prior submittal.

- C. The sum duration of all incidents during the quarter.
- D. If there have been no such incidents during the calendar quarter, this shall be stated in the report.

#### 7.3.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational changes with respect to the affected processes without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7)(a) and (l) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity constituting a modification as defined by 40 CFR 52.21 or 35 IAC 203.207, as applicable, or for an activity for which a permit is required pursuant to 35 IAC 201.142.

- a. Processing of solid fuels other than coal.
- b. Operation of additional dust suppressant systems.
- c. Operation of additional dust collection equipment.
- d. Operation of replacement dust suppression systems or dust collection equipment that is of equal or greater effectiveness in controlling visible emissions than the device(s) being replaced as recognized in a Construction Permit for such system or equipment.

#### 7.3.12 Compliance Procedures

- a. Compliance with Condition 7.3.4 is addressed by the observations, inspections, and recordkeeping required by Conditions 7.3.7(a), 7.3.8, and 7.3.9, respectively.
- b. Compliance with Condition 7.3.6 is addressed by the inspections and recordkeeping required by Conditions 7.3.8 and 7.3.9, respectively.

Note: This condition is included in this permit pursuant to Section 39.5(7)(p)(v) of the Act.

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7.4 Gasoline Storage Tank

7.4.1 Description

The 1,000 gallon capacity storage tank with submerged loading pipe is associated with non-retail dispensing of gasoline for plant vehicles and equipment.

Note: The description in Condition 7.4.1 is for informational purposes only and implies no limits or constraints.

7.4.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Tank 1	Gasoline Storage Tank, with Submerged Loading Pipe	None

7.4.3 Applicability Provisions

An "affected storage tank" for the purpose of these unit-specific conditions is the storage tank described in Conditions 7.4.1 and 7.4.2.

7.4.4 Applicable Emission Standards

- a. The affected storage tank is subject to 35 IAC 215.122(b) and 215.583(a)(1), which provide that:
  - i. No person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 l (250 gal), unless such tank is equipped with a permanent submerged loading pipe or satisfies one of several other compliance options as specified in 35 IAC 215.122(b).
  - ii. No person shall cause or allow the transfer of gasoline from any delivery vessel into any stationary storage tank at a gasoline dispensing facility unless the tank is equipped with a submerged loading pipe [35 IAC 215.583(a)(1)].

7.4.5 Non-Applicability of Regulations of Concern

- a. The affected storage tank is not subject to the New Source Performance Standards (NSPS) for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels), 40 CFR Part 60, Subpart Kb, because the capacity of the tank is less than 40 cubic meters (10,566 gallons).

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- b. The affected storage tank is not subject to 35 IAC 215.121 or 215.122(a) because the capacity of the tank is less than 40,000 gallons.
- c. The affected storage tank is not subject to the requirements of 35 IAC 215.583(a)(2) related to transfers of gasoline to a stationary storage tank at a gasoline dispensing facility because the affected tank is located in Massac County [35 IAC 215.583(b)].
- d. The affected gasoline storage tank is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for VOM because the affected storage tank does not use add-on controls to achieve compliance with any applicable emission limits.
- e. The affected storage tank is not subject to the National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities, 40 CFR Part 63, Subpart CCCCCC, because the gasoline storage tank is not located at an Area Source for Hazardous Air Pollutants.

#### 7.4.6 Operational Limits

- a. Pursuant to Condition 7.4.4(a) (35 IAC 215.122(b) and 215.583(a)(1)), the affected storage tank shall be equipped, operated and maintained with a submerged loading pipe or an equivalent device approved by the Illinois EPA. (The Illinois EPA has not approved use of other equivalent equipment in lieu of a submerged loading pipe.)

#### 7.4.7 Intentionally Blank.

#### 7.4.8 Inspection Requirements

Not later than May 1st of each calendar year, the Permittee shall conduct an inspection of the affected storage tank to review its physical condition and ability to comply with the applicable equipment and operational requirements of Conditions 7.4.6(a), pursuant to Sections 39.5(7)(a) and (d) of the Act.

#### 7.4.9 Recordkeeping Requirements

The Permittee shall maintain records of the following for the affected storage tank, pursuant to Sections 39.5(7)(a) and (e) of the Act:

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- a. Design information for the capacity of the tank and the presence of a permanent submerged loading pipe.
- b. Operating records for the affected tank that shall include the following:
  - i. Information identifying deviations from applicable equipment requirements, with a detailed description and explanation.
  - ii. Information documenting performance of the inspections that are required by Condition 7.4.8, including date and description of the inspection, confirmation of the adequacy of the specific features of the tank required for control of emissions, and identification of any such features that are not in proper working order or otherwise deficient, with recommendations for maintenance, repair or replacement.
- c. Maintenance and repair records for the affected storage tank, as related to the repair or replacement of the loading pipe.
- d. Records for each shipment of material loaded into the affected storage tank, including type of material and amount.
- e. Throughput of material, gal/mo and gal/yr, by type of material.

#### 7.4.10 Reporting Requirements

For the affected storage tank, the Permittee shall promptly notify the Illinois EPA of deviations from permit requirements as follows. Such notifications shall include a description of each incident and a discussion of the probable cause of deviation, any corrective actions taken and any preventative measures taken, pursuant to Section 39.5(7)(f)(ii) of the Act:

- a. The Permittee shall submit written notice to the Illinois EPA within 30 days after any filling of an affected storage tank that was not in compliance with the requirements of Conditions 7.4.4 or 7.4.6, i.e., that was conducted without a submerged loading pipe.
- b. The Permittee shall notify the Illinois EPA through the quarterly reports required for the coal-fired boilers by Condition 7.1.10-2(a) for deviations from applicable recordkeeping requirements.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected storage tank without prior notification to the Illinois EPA or revision of this permit, pursuant to Sections 39.5(7) (a) and (l) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity constituting a modification as defined by 40 CFR 52.21 or 35 IAC 203.207, as applicable, or for any activity constituting construction or modification as defined in 35 IAC 201.102.

- a. Changes to components related to the submerged loading pipe, including addition of new components and repair and replacement of components.
- b. Changes in the material stored in the affected storage tank.

7.4.12 Compliance Procedures

- a. Compliance with Condition 7.4.4(a) is addressed by the use of a submerged loading pipe as required in Condition 7.4.6(a) and by the inspections and recordkeeping required by Conditions 7.4.8 and 7.4.9.
- b. Compliance with Condition 7.4.6 is addressed by the inspections and the recordkeeping required by Conditions 7.4.8 and 7.4.9, respectively.

Note: This condition is included in this permit pursuant to Section 39.5(7) (p) (v) of the Act.



7.5 Intentionally Blank

7.6 Fly Ash Handling Equipment

7.6.1 Description

The Permittee operates a dry fly ash removal system that handles and stores fly ash collected at the coal-fired boilers. Associated particulate matter (PM) emissions are controlled by various control measures such as moisture content of the fly ash, enclosures, covers, enclosed chute, dust suppression and dust collection devices.

Note: The description in Condition 7.6.1 is for informational purposes only and implies no limits or constraints.

7.6.2 List of Emission Units and Air Pollution Control Equipment

The following is a list of the fly ash equipment and associated emission control systems at the source:

Emission Unit Description	Emission Control Equipment/Measures
Fly Ash Conveying Systems	Enclosure and Filter Dust Collection Devices
Fly Ash Storage Silos	
Dry Fly Ash Loadout	Enclosure, Covers, Filter Dust Collection Devices and Dust Suppression
Fly Ash Batch Mixer and Conditioned Ash Loadout	Wet Process, Dust Collector and Enclosed Chute

7.6.3 Applicability Provisions

- a. An "affected process" for the purpose of these unit-specific conditions is an individual process emission unit that handles fly ash as described in Conditions 7.6.1 and 7.6.2.
- b. Subject to the following terms and conditions, the Permittee is authorized to continue operation of an affected process in violation of the applicable standards identified or cross-referenced in Condition 5.2.2(b) (35 IAC 212.123) and Condition 7.6.4(c) (35 IAC 212.321(a)) in the event of a malfunction or breakdown of an affected process. This authorization is provided pursuant to 35 IAC 201.149, 201.261, and 201.262, as the Permittee has applied for such authorization in its application, generally explaining why such operation would be required to provide essential service or to prevent injury to

personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.

- i. This authorization only allows such continued operation as related to the operation of the coal-fired boilers as necessary to provide essential service or to prevent injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.
- ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable repair the affected process, remove the affected process from service, or undertake other action so that excess emissions cease.
- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.6.9(e) and 7.6.10(b). For these purposes, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the affected process out of service.
- iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.
- v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided

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that the Permittee has fully complied with all terms and conditions connected with such authorization.

7.6.4 Applicable Emission Standards

- a. The standard that addresses fugitive emissions, as defined by 35 IAC 211.2490, of the affected processes is set forth in Condition 5.2.2(a).
- b. The standard that addresses the opacity of the emission of smoke or other particulate matter from the affected processes is set forth in Condition 5.2.2(b).
- c. The affected processes shall comply with 35 IAC 212.321(a): "no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of [35 IAC 212.321]". Each unit, i.e. each fly ash conveyor, fly ash silo or fly ash wet mixing system, shall demonstrate compliance individually. (See also Attachment 1.) [35 IAC 212.321(a)]

7.6.5 Non-Applicability of Regulations of Concern

- a. The affected processes are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM, because the affected processes do not have potential pre-control device emissions of the applicable regulated air pollutant that equal or exceed major source threshold levels.

7.6.6 Work Practices and Emission Limitations

- a. i. The Permittee shall implement and maintain the control measures for the affected processes, such as moisture content of the fly ash, enclosures, covers, enclosed chute, dust suppression and dust collection devices, for emissions of particulate matter to support periodic monitoring for the applicable requirements in Conditions 7.6.4 and 7.6.6(b), pursuant to Section 39.5(7)(a) of the Act.

- ii. The control measures implemented and maintained shall be identified and operated in conformance with the "Control Measures Record" required by Condition 7.6.9(b)(i) to satisfy Condition 7.6.6(a)(i), which record is incorporated by reference into this permit by Condition 5.2.8.
- b. i. The amount of fly ash handled by the fly ash silos, determined as fly ash unloaded from the silos on a dry basis, shall not exceed 20,600 tons/month and 206,000 tons/year. Compliance with this annual limit shall be determined from a running total of 12 months of data.  
[T1R]
- ii. PM Emissions of the fly ash silos and wet mixing system shall not exceed the following limits. Compliance with annual limits shall be determined from a running total of 12 months of data: [T1R]

Equipment	Emission Factor (Lbs/Ton)	Emissions	
		Tons/Mo	Tons/Yr
Dry Ash Silo Loading	0.036	0.62	3.71
Dry Ash Silo Unloading	0.0072	0.13	0.74
Wet Mixing System	0.0173	<u>0.31</u>	<u>1.78</u>
	Totals	1.06	6.23

Note: These limits were established in Permits 93070073 and 09020049, which address the wet fly ash mixing system and the newer dry fly ash handling equipment, respectively. For the dry ash handling equipment, for which control devices are used, these emission limits are based on USEPA emission factors in Table 11.12-2 of AP-42 for handling of Portland cement at concrete batch plants, with the application of control efficiencies of 95 and 99 percent, respectively, for loading of silos and load out,.

#### 7.6.7 Opacity Observations and Emission Testing Requirements

- a. i. The Permittee shall have the opacity of the emissions from the affected processes during representative operating conditions determined by a qualified observer in accordance with Reference Method 9, as further specified below, pursuant to Section 39.5(7)(d) of the Act.
  - A. For each affected process, observations shall be conducted not later than two

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years after the effectiveness of this condition.

- B. Thereafter, for each affected process, observations shall be conducted every third year.
  - C. Upon written request by the Illinois EPA, such observations shall be conducted for specific affected process(es) not later than 45 calendar days after the Permittee has received the request or on such later date agreed to by the Illinois EPA.
- ii. The duration of opacity observations for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes of observations (two six-minute averages) are each not greater than 10.0 percent.
  - iii.
    - A. For each set of observations required by Conditions 7.6.7(a)(i)(A), (B), and (C), the Permittee shall notify the Illinois EPA at least 7 days in advance of the date of the first observation(s).
    - B. The Permittee shall promptly notify the Illinois EPA of any changes in the date of the first observation(s).
  - iv. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of the observation(s), if Illinois EPA personnel are present.
  - v. The Permittee shall submit a written report for these observations not later than 30 days after the date of completion of each set of opacity observations required by Conditions 7.6.7(a)(i)(A), (B), and (C). The report shall include a copy of the current Reference Method 9 certification of each observer and shall identify the observer's current employer. This report shall also include the following for each observation:
    - A. Identification of the affected process for which observations were conducted.
    - B. Date and time of observations.

- C. Description of observation conditions, including recent weather.
  - D. Description of the operating conditions of the affected processes.
  - E. Raw data.
  - F. Opacity determinations.
  - G. Conclusions.
- b. i. Within 90 days after the Permittee has received a written request from the Illinois EPA, the Permittee shall have the PM emissions at the stacks or vents of the affected processes, as specified in such request, measured during representative operating conditions, as set forth below, pursuant to Section 39.5(7)(d) of the Act.
- ii. A. Testing shall be conducted using appropriate Reference Methods, including Method 5 or 17 for PM emissions.
- B. Compliance may be determined from the average of three valid test runs, subject to the limitations and conditions contained in 35 IAC Part 283.
- iii. The Permittee shall submit a test plan as required by Condition 8.6.2.
- iv. The Illinois EPA shall be notified prior to these tests to enable the Illinois EPA to observe these tests. Notification of the expected date of testing shall be submitted a minimum of 30 days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual date of the test. The Illinois EPA may, at its discretion, accept notification with shorter advance notice provided that the Illinois EPA will not accept such notification if it interferes with the Illinois EPA's ability to observe the testing.
- v. The Permittee shall expeditiously submit complete final report(s) for required emission testing to the Illinois EPA, no later than 90 days after the date of testing. These reports

shall include the information specified in Condition 8.6.3 and a detailed description of the operating conditions of those affected processes during testing, including operating rate (tons/hr) and the control devices being used.

7.6.8 Inspection Requirements

- a. The Permittee shall perform inspections as follows to confirm compliance with the requirements of Condition 7.6.6(a) [Sections 39.5(7) (a) and (d) of the Act].
  - i. Affected processes other than fly ash loadout operations shall be inspected on at least a monthly basis.
  - ii. Affected fly ash loadout operations shall be inspected on at least a weekly basis.
  - iii. If an affected process is not in operation during an inspection, this shall be noted in the inspection record.
  - iv. The records required by Condition 7.6.9(d) for these inspections shall be signed off by supervisory or management personnel.
- b. As part of the inspections of Condition 7.6.8(a), the Permittee shall perform observations of the affected processes for visible emissions in accordance with 35 IAC 212.107 to demonstrate compliance with the requirements of Condition 7.6.4(b), unless the Permittee elects to perform Reference Method 9 observations in accordance with Condition 7.6.7(a). These observations may be scheduled so that only a number of affected processes are reviewed during each inspection, provided, however, that each affected process that is in routine service shall be observed at least once during each calendar year in which it is operating other than loadout operations, which shall each be observed at least once during each calendar quarter in which such loadout operation is operating [Sections 39.5(7) (b) and (d) of the Act].
- c. If visible emissions are observed, the Permittee shall take corrective action within 2 hours to return the status of the process to no visible emission or shall conduct observations of opacity by Reference Method 9 within one week in accordance with Condition 7.6.7(a). If the Permittee performs Reference Method 9 observations under this Condition 7.6.8(b), such



observations are not subject to the notice requirements of Condition 7.6.7(a)(iii) through (v) [Sections 39.5(7)(b) and (d) of the Act].

- d. The Permittee shall perform and document an inspection of the fly ash transport baghouses to confirm proper condition and operation at least once per week. This inspection shall include recording and verifying that the monitored baghouse differential pressure is within the operating range specified in the record required by Condition 7.6.9(b)(i) and that visible emissions are not observed in the baghouse exhaust [Sections 39.5(7)(a) and (d) of the Act].

#### 7.6.9 Recordkeeping Requirements

Pursuant to Sections 39.5(7)(a) and (e) of the Act:

- a. The Permittee shall maintain records of the following for the affected processes:
  - i. Maximum operating capacity of each affected process (tons/hour).
  - ii. Information related to any baghouses associated with the affected processes, including available design control efficiency or performance specifications and maximum design particulate matter emissions, gr/dscf, with supporting information, which information shall be kept up to date.
  - iii. Maintenance and repair record(s) for the air pollution control equipment associated with the affected processes, including dust suppressant application systems, which record(s) shall list the activities performed on each item of equipment or system, with date and description. (See also Condition 9.6.1, Control Equipment Maintenance Records.)
- b. i. The Permittee shall maintain a record, which shall be kept up to date to reflect any changes that the Permittee may elect to make, that contains the following for each affected process for which a control measure must be implemented and maintained pursuant to Condition 7.6.6(a)(i).
  - A. The type of emission unit (pneumatic transfer system, silos, etc.) and the

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Permittee's designation for each emission unit with a description of the emission points on the emission unit;

- B. Description of the primary control measures that are utilized, with a description of the control measure and estimated frequency of application, if not continuous. If the primary control device is a baghouse, identification of the normal operating range for the differential pressure across the baghouse; and
  - C. Description of any secondary control measures that would be used based on circumstances (freezing temperatures, recent rain, dry weather, etc.) with identification of the circumstances in which they would be used and whether they would take the place of or supplement the primary control measures.
- ii. Accompanying this record, the Permittee shall maintain a demonstration that confirms that the control measures identified in the record required by Condition 7.6.9(b)(i) are sufficient to assure compliance with Condition 7.6.4(c) at the maximum process weight rate at which each affected process can be operated (tons fly ash/hour) and the emission limits in Condition 7.6.6(b), with supporting emission calculations and documentation for the emission factors and the efficiency of the control measures being relied upon by the Permittee. This demonstration shall include the information addressed by Conditions 7.6.9(a)(i) and (ii), results of any testing conducted in accordance with 7.6.7(b), emission factors for uncontrolled PM emissions, and/or controlled PM emissions published by USEPA or other credible sources.
  - iii. Any subsequent revisions to this record related to control measures or affected processes, including their method of operation, shall be submitted not later than 30 days after the date of the revision. Upon request by the Illinois EPA, the Permittee shall submit other relevant information related to the control measures.

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- c. The Permittee shall maintain a record of the amount of fly ash handled by the affected processes (tons/month and tons/year).
- d. The Permittee shall maintain records of the following for the inspections required by Condition 7.6.8:
  - i. Date and time the inspection was performed, name(s) of inspection personnel, and specific affected process(es) inspected.
  - ii. The observed condition of the control measures identified in the record required by Condition 7.6.9(b)(i) for each inspected affected process, including the presence of any visible emissions or atypical accumulations of fly ash in the vicinity of the process.
  - iii. A description of any maintenance or repair of equipment associated with control measures identified in the record required by Condition 7.6.9(b)(i) that is recommended as a result of the inspection and associated work order number(s).
  - iv. A description of any corrective action taken if visible emissions were observed, including whether corrective action took place within 2 hours of the observation and whether the status of the process returned to no visible emissions.
  - v. For the baghouse inspection in Condition 7.6.8(d), a record of the actual differential pressure observed.
- e. The Permittee shall maintain records of the following for each incident when any affected process operated without the control measure(s) required pursuant to the record required by Condition 7.6.9(b)(i) and each incident when an affected process continued to operate during malfunction or breakdown with excess emissions or excess opacity as addressed by Condition 7.6.3(b):
  - i. The date of the incident and identification of the affected process(es) that was involved.
  - ii. A description of the incident, including the control measure(s) that was not present or operated as required by the record identified in Condition 7.6.9(b)(i); other control

measures that were operated, if any; the measures taken to minimize and correct deficiencies with chronology; and an explanation whether the emissions or opacity during the incident exceeded any applicable emission or opacity standard, as listed in Condition 7.6.4.

- iii. The time at and means by which the incident was identified, e.g., scheduled inspection or observation by operating personnel.
  - iv. The length of time after the incident was identified that the affected processes continued to operate before the control measures required by the record identified in Condition 7.6.9(b)(i) were in place or the processes were shut down (to resume operation only after such control measures were in place); an explanation of why continued operation was necessary; and, if this time was more than one hour, an explanation of why this time was not shorter, including a description of any mitigation measures that were implemented during the incident.
  - v. The estimated total duration of the incident, i.e., the total length of time that the affected processes ran without the control measure(s) required pursuant to the record required by Condition 7.6.9(b)(i) and the estimated amount of fly ash handled during the incident.
  - vi. A discussion of the probable cause of the incident and any preventative measures taken.
- f. The Permittee shall keep records for all opacity observations made in accordance with Reference Method 9 for the affected processes that it conducts or that are conducted at its behest by individuals who are qualified to make such observations. For each occasion on which such observations are made, these records shall include the formal report for the observations if conducted pursuant to Condition 7.6.7 (Opacity Observation and Emission Testing Requirements) or otherwise the identity of the observer, a description of the observations that were made, the operating condition of the affected process(es), the observed opacity, copies of the raw data sheets for the observations, and the reason for the opacity observations, e.g., Reference Method 9

opacity observations required by Condition 7.6.7(a)(i), written request by the Illinois EPA, or any required Reference Method 9 opacity observations following observations of visible emissions under Condition 7.6.8(b).

- g. To demonstrate compliance with Condition 7.6.6(b), the Permittee shall keep records for PM emissions of the fly ash batch mixer (tons/month and tons/year) based on the records required by Condition 7.6.9(b)(ii) and 7.6.9(c).

#### 7.6.10 Reporting Requirements

##### a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA of deviations from permit requirements for the affected processes, as follows. Such notifications shall include a description of each deviation and a discussion of the probable cause of deviation, any corrective actions taken, and any preventative measures taken, pursuant to Section 39.5(7)(f)(ii) of the Act.

- i. For those breakdown or malfunction PM and opacity events that require notification and reporting pursuant to Condition 7.6.10(b)(i), notification and reporting shall be provided pursuant to Condition 7.6.10(b)(i) rather than 7.6.10(a).
- ii. Within 30 days after the conclusion of an incident in which the Permittee continued to operate an affected process for more than 12 operating hours after discovering that emission control measures required by the record identified in Condition 7.6.9(b)(i) were not present or operating, the Permittee shall submit written notice to the Illinois EPA. Such notifications shall be accompanied by a copy of the records for the incident required by Condition 7.6.9(e).
- iii. A. Except for events and incidents for which notification or reporting is required by Condition 7.6.10(a)(ii) or 7.6.10(b)(i), as referenced in 7.6.10(a)(i), all other notifications shall be submitted with the quarterly reports required by Condition 7.6.10(b)(ii).

- B. With the quarterly report, the Permittee shall also address deviations that occurred during the quarter that have been separately reported to the Illinois EPA, with a summary of such deviations. For this purpose, the Permittee need not resubmit the detailed information provided in prior notifications and reports for such deviations.
- b. Reporting When Continued Operation Occurred During Malfunctions and Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7) (a) and (f) of the Act, the Permittee shall provide the following notifications and reports to the Illinois EPA for incidents when operation of an affected process(es) continued with excess emissions or excess opacity during malfunction or breakdown as addressed by Condition 7.6.3(b).

- i. A. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone, facsimile, or electronic mail, for each incident in which the opacity from an affected process exceeds 30 percent for eight or more 6-minute averaging periods within a two hour period unless the Permittee has begun the shutdown by such time. (Otherwise, if opacity during an incident only exceeds 30 percent for no more than seven 6-minute averaging periods, the Permittee need only report the incident in the quarterly report, in accordance with Condition 7.6.10(b) (ii).)
- B. Upon conclusion of each incident that is two hours or more in duration, the Permittee shall submit a written follow-up notice to the Illinois EPA, Compliance Section and Regional Office, within 15 days providing a copy of the records for the incident required by Condition 7.6.9(e).
- ii. The Permittee shall submit quarterly reports to the Illinois EPA that include the following information for incidents during the quarter in which affected processes continued to operate during malfunction or breakdown with excess emissions or excess opacity. These

reports shall be submitted with the quarterly reports submitted for the coal-fired boiler pursuant to Condition 7.1.10-2(a).

- A. A listing of such incidents, in chronological order, that includes:
  - I. The date, time, and duration of each incident;
  - II. The identity of the affected process(es) involved in the incident; and
  - III. Whether a follow-up notice was submitted for the incident pursuant to Condition 7.6.10(b)(i)(B), with the date of the notice.
- B. A description of the incident, discussion of probable cause of the incident, corrective actions taken, and any preventative measures taken; provided, however, that the Permittee need not resubmit information provided in a prior report for an incident, as identified above, but may elect to supplement the prior submittal.
- C. The sum duration of all incidents during the quarter.
- D. If there have been no such incidents during the calendar quarter, this shall be stated in the report.

7.6.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational changes with respect to the affected processes without prior notification to the Illinois EPA or revision of this permit, pursuant to Sections 39.5(7)(a) and (1) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity constituting a modification as defined by 40 CFR 52.21 or for an activity for which a permit is required pursuant to 35 IAC 201.142.

- a. Operation of additional dust control measures.

- b. Operation of replacement dust control measures that are of equal or greater effectiveness in controlling visible emissions than the measures being replaced, as recognized in a Construction Permit for such measures.

7.6.12 Compliance Procedures

- a. Compliance with Condition 7.6.4 is addressed by the observations, inspections, and recordkeeping required by Conditions 7.6.7(a), 7.6.8, and 7.6.9, respectively.
- b. Compliance with Condition 7.6.6 is addressed by the inspections and recordkeeping required by Conditions 7.6.8 and 7.6.9, respectively.

Note: This condition is included in this permit pursuant to Section 39.5(7)(p)(v) of the Act.



## 8.0 GENERAL PERMIT CONDITIONS

### 8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

### 8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is an affected source under Title IV of the CAA and is subject to requirements pursuant to Title IV of the CAA as specified in Section 6.2 of this permit. To the extent that the federal regulations promulgated under Title IV of the CAA, are inconsistent with the requirements of this permit, the federal regulations promulgated under Title IV of the CAA shall take precedence pursuant to Section 39.5(17)(j) of the Act.

### 8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement [Section 39.5(7)(o)(vii) of the Act].

### 8.4 Operational Flexibility/Anticipated Operating Scenarios

#### 8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

#### 8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms without applying for or obtaining an amendment to this permit, provided that [Section 39.5(12)(a)(i) of the Act]:

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- a. The changes do not violate applicable requirements;
- b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements;
- c. The changes do not constitute a modification under Title I of the CAA;
- d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and
- e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:
  - i. Describe the physical or operational change;
  - ii. Identify the schedule for implementing the physical or operational change;
  - iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;
  - iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
  - v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

#### 8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods if applicable test methods are not specified by the applicable regulations or otherwise identified in the condition of this permit. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Conditions 8.6.3 and 8.6.4.

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## 8.6 Reporting Requirements

### 8.6.1 Monitoring Reports

Reports summarizing required monitoring as specified in the conditions of this permit shall be submitted to the Illinois EPA every six months as follows, unless more frequent submittal of such reports is required in Section 7 of this permit [Section 39.5(7)(f) of the Act]:

<u>Monitoring Period</u>	<u>Report Due Date</u>
January - June	September 1
July - December	March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

### 8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

- a. The name and identification of the affected unit(s);
- b. The person(s) who will be performing sampling and analysis and their experience with similar tests;
- c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;
- d. The specific determinations of emissions and operation that are intended to be made, including sampling and monitoring locations;
- e. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods;
- f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and

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- g. Any proposed use of an alternative test method, with detailed justification.

#### 8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

- a. The name and identification of the affected unit(s);
- b. The date and time of the sampling or measurements;
- c. The date any analyses were performed;
- d. The name of the company that performed the tests and/or analyses;
- e. The test and analytical methodologies used;
- f. The results of the tests and/or analyses, with raw data and sample calculations;
- g. The operating conditions at the time of the sampling or measurements; and
- h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

#### 8.6.4 Reporting Addresses

- a. Unless otherwise specified in the particular provision of this permit or in the written instructions distributed by the Illinois EPA for particular reports, reports and notifications shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.
- b. As of the date of issuance of this permit, the addresses of the offices that should generally be utilized for the submittal of reports and notifications are as follows:
  - i. Illinois EPA - Air Compliance Section  
  
Illinois Environmental Protection Agency (MC 40)  
Bureau of Air  
Compliance & Enforcement Section (MC 40)  
1021 North Grand Avenue East

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P.O. Box 19276  
Springfield, Illinois 62794-9276

OR

Illinois Environmental Protection Agency  
Bureau of Air  
Compliance & Enforcement Section (#40)  
1021 North Grand Avenue East  
Springfield, Illinois 62702

ii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
2009 Mall Street  
Collinsville, Illinois 62234

iii. USEPA Region 5 - Air Branch

USEPA (AR - 17J)  
Air & Radiation Division  
77 West Jackson Boulevard  
Chicago, Illinois 60604

c. Permit applications should be addressed to the Air Permit Section. As of the date of issuance of this permit, the address of the Air Permit Section is as follows:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Air Permit Section (MC 11)  
1021 North Grand Avenue East  
P.O. Box 19506  
Springfield, Illinois 62794-9506

OR

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Air Permit Section (MC 11)  
1021 North Grand Avenue East  
Springfield, Illinois 62702

8.7 Title I Conditions

Notwithstanding the expiration date on the first page of this CAAPP permit, Title I conditions in this permit, which are identified by a T1, T1N, or T1R designation, remain in effect until such time as the Illinois EPA takes action to revise or terminate them in accordance with applicable procedures for

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action on Title I conditions. This is because these conditions either: (a) incorporate conditions of earlier permits that were issued by the Illinois EPA pursuant to authority that includes authority found in Title I of the Clean Air Act (T1 conditions), (b) were newly established in this CAAPP permit pursuant to authority that includes such Title I authority (T1N conditions), or (c) reflect a combination of conditions of such previous permits and revisions to those conditions established in this CAAPP permit (T1R conditions). (See also Condition 1.5.)

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule [Section 39.5(7)(j)(iv) of the Act].

9.1.2 In particular, this permit does not alter or affect the following:

- a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;
- b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and
- d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.

9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance with, or violation of, any applicable requirement to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the Permittee, including, but not limited to, challenging the use of the USEPA's credible evidence rule in the context of any future proceeding consistent with *Clean Air Implementation Project v. EPA*, 150 F3d 1200 (D.C. Circuit 1998).

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

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The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless this permit provides for such continued operation consistent with the Act and applicable Board regulations. [Section 39.5(6)(c) of the Act]

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated thereunder.

9.3 Obligation to Allow Illinois EPA Surveillance

Pursuant to Sections 4(b), 39.5(7)(a), and 39.5(7)(p)(ii) of the Act, upon presentation of credentials and other documents as may be required by law and in accordance with constitutional limitations, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following.

- a. Enter upon the Permittee's premises where the emission unit(s) are located, or emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit.
- c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

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- d. Sample or monitor any substances or parameters at any location:
  - i. As authorized by the Clean Air Act, at reasonable times, for the purposes of assuring compliance with this CAAPP permit or applicable requirements; or
  - ii. As otherwise authorized by the Act.
- e. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

#### 9.4 Fees

The Permittee shall pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto. [Section 39.5(7)(o)(vi) of the Act] Fees shall be paid by check sent to one of the following two addresses:

Illinois Environmental Protection Agency  
Fiscal Services Section  
1021 North Grand Avenue East  
Springfield, IL 62702

OR

Illinois Environmental Protection Agency  
Fiscal Services Section  
P.O. Box 19276  
Springfield, IL 62794-9276

#### 9.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege [Section 39.5(7)(o)(iv) of the Act].

#### 9.6 Recordkeeping

##### 9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. As a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

##### 9.6.2 Records of Changes in Operation

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A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes [Section 39.5(12)(b)(iv) of the Act].

9.6.3 Retention of Records

- a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e)(ii) of the Act].
- b. Other records required by this permit including any logs, plans, procedures, or instructions required to be kept by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Air Quality Planning Section no later than May 1 of the following year, as required by 35 IAC Part 254 and Section 4(b) of the Act.

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to: (1) the Illinois EPA, Air Compliance Section, and (2) the Illinois EPA, Air Regional Field Office. (The addresses for the submittal of these compliance certifications are provided in Condition 8.6.4.)

- a. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.

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- b. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as an attachment to this permit.

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit [Section 39.5(7)(o)(ii) of the Act].

9.10.2 Emergency Provision

- a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating records, or other relevant evidence:

- i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency;

Note: For this purpose, emergency means a situation arising from sudden and reasonably unforeseeable events beyond the control of the source, as further defined by Section 39.5(7)(k)(iv) of the Act.

- ii. The permitted source was at the time being properly operated;
- iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and

corrective actions taken; and

- iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.
- b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

#### 9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

#### 9.12 Reopening and Reissuing Permit for Cause

##### 9.12.1 Permit Actions

This permit may be modified, revoked, reopened and reissued, or terminated for cause in accordance with applicable provisions of Section 39.5 of the Act. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

##### 9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15)(a) of the Act]:

- a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;
- b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;
- c. The Illinois EPA or USEPA determines that this permit contains a material mistake or that inaccurate

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statement were made in establishing the emission standards or limitations, or other terms or conditions of this permit; and

- d. The Illinois EPA or USEPA determines that this permit must be revised or revoked to ensure compliance with the applicable requirements.

#### 9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation and reissuance under Section 39.5(15) of the Act, pursuant to Sections 39.5(5)(e) and (i) of the Act.

#### 9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7)(o)(v) of the Act].

#### 9.13 Severability Clause

The provisions of this permit are severable. In the event of a challenge to any portion of this permit, other portions of this permit may continue to be in effect. Should any portion of this permit be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected and the rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force [Section 39.5(7)(i) of the Act].

#### 9.14 Permit Expiration and Renewal

Upon the expiration of this permit, if the source is operated, it shall be deemed to be operating without a permit unless a timely and complete CAAPP application has been submitted for renewal of this permit. However, if a timely and complete application to renew this CAAPP permit has been submitted, the terms and all conditions of this CAAPP permit will remain in effect until the issuance of a renewal permit. [Sections 39.5(5)(l) and (o) of

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the Act]

Note: Pursuant to Sections 39.5(5)(h) and (n) of the Act, upon submittal of a timely and complete renewal application, the permitted source may continue to operate until final action is taken by the Illinois EPA on the renewal application, provided, however, that this protection shall cease if the applicant fails to submit any additional information necessary to evaluate or take final action on the renewal application as requested by the Illinois EPA in writing. For a renewal application to be timely, it must be submitted no later than 9 months prior to the date of permit expiration.

9.15 General Authority for the Terms and Conditions of this Permit

The authority for terms and conditions of this permit that do not include a citation for their authority is Section 39.5(7)(a) of the Act, which provides that the Illinois EPA shall include such provisions in a CAAPP permit as are necessary to accomplish the purposes of the Act and to assure compliance with all applicable requirements. Section 39.5(7)(a) of the Act is also another basis of authority for terms and conditions of this permit that do include a specific citation for their authority.

Note: This condition is included in this permit pursuant to Section 39.5(7)(n) of the Act.

## 10.0 ATTACHMENTS

### 10.1 Attachment 1 Emissions of Particulate Matter from New Process Emission Units

35 IAC 212.321 - Process Emission Units for Which Construction or Modification Commenced On or After April 14, 1972

- a) Except as further provided in this Part, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of this Section.
- b) Interpolated and extrapolated values of the data in subsection (c) of this Section shall be determined by using the equation [35 IAC 212.321(b)]:

$$E = A(P)^B$$

where:

P = Process weight rate; and

E = Allowable emission rate; and,

- 1) Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

- 2) For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

- c) Limits for Process Emission Units For Which Construction or Modification Commenced On or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and  
E = Allowable emission rate in kg/hr or lbs/hr.



10.2 Attachment 2 Emissions of Particulate Matter from Existing Process Emission Units

35 IAC 212.322 - Process Emission Units for Which Construction or Modification Commenced Prior to April 14, 1972

- a) Except as further provided in this Part, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in subsection (c) of this Section.
- b) Interpolated and extrapolated values of the data in subsection (c) of this Section shall be determined by using the equation:

$$E = C + A(P)^B$$

where:

P = Process weight rate; and

E = Allowable emission rate; and,

1) For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

2) For process weight rates in excess of 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	- 18.4	- 40.0

- c) Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

where:

P = Process weight rate in Mg/hr or T/hr, and

E = Allowable emission rate in kg/hr or lbs/hr.

10.3 Attachment 3 - Example Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Official Title: \_\_\_\_\_

Telephone No.: \_\_\_\_\_

Date Signed: \_\_\_\_\_

#### 10.4 Attachment 4 - Guidance

The Illinois has prepared guidance for sources on the Clean Air Act Permit Program (CAAPP) that is available on the Internet site maintained by the Illinois EPA, [www.epa.state.il.us](http://www.epa.state.il.us). This guidance includes instructions on applying for a revision or renewal of the CAAPP permit.

Guidance On Revising A CAAPP Permit:

[www.epa.state.il.us/air/caapp/caapp-revising.pdf](http://www.epa.state.il.us/air/caapp/caapp-revising.pdf)

Guidance On Renewing A CAAPP Permit:

[www.epa.state.il.us/air/caapp/caapp-renewing.pdf](http://www.epa.state.il.us/air/caapp/caapp-renewing.pdf)

The application forms prepared by the Illinois EPA for the CAAPP are also available from the Illinois EPA's Internet site:

[www.epa.state.il.us/air/caapp/index.html](http://www.epa.state.il.us/air/caapp/index.html)

These CAAPP application forms should also be used by a CAAPP source when it applies for a construction permit. For this purpose, the appropriate CAAPP application forms and other supporting information, should be accompanied by a completed

Application For A Construction Permit Form (CAAPP Form-199):

[www.epa.state.il.us/air/caapp/199-caapp.pdf](http://www.epa.state.il.us/air/caapp/199-caapp.pdf)

10.5 Attachment 5 - Acid Rain Program Permit

217-785-1705

ACID RAIN PROGRAM  
PERMIT

Electric Energy, Inc.  
Attn: Mr. Gregory T. Russell, Designated Representative  
Post Office Box 165  
Joppa, Illinois 62953

Oris No.: 887  
IEPA I.D. No.: 127855AAC  
Source/Unit: Joppa Power Station/ Units 1 through 6  
Date Received: TBD  
Date Issued: TBD  
Effective Date: January 1, TBD  
Expiration Date: TBD

**STATEMENT OF BASIS:**

In accordance with Section 39.5(17) if the Illinois Environmental Protection Act and Titles IV and V of the Clean Air Act, the Illinois Environmental Protection Agency is issuing this Acid Rain Program permit, including requested revisions, to Electric Energy, Inc. for its Joppa Power Station.

**SULFUR DIOXIDE (SO<sub>2</sub>) ALLOCATIONS AND NITROGEN OXIDES (NO<sub>x</sub>) LIMITS FOR EACH AFFECTED UNIT:**

UNIT 1	SO <sub>2</sub> Allowances, under Tables 2, 3, or 4 of 40 CFR Part 73	Years 2016 and Beyond
		5,297
	NO <sub>x</sub> Limit	0.45 Lb/mmBtu
UNIT 2	SO <sub>2</sub> Allowances, under Tables 2, 3, or 4 of 40 CFR Part 73	Years 2016 and Beyond
		4,530
	NO <sub>x</sub> Limit	0.45 Lb/mmBtu
UNIT 3	SO <sub>2</sub> Allowances, under Tables 2, 3, or 4 of 40 CFR Part 73	Years 2016 and Beyond
		5,162
	NO <sub>x</sub> Limit	0.45 Lb/mmBtu
UNIT 4	SO <sub>2</sub> Allowances, under Tables 2, 3, or 4 of 40 CFR Part 73	Years 2016 and Beyond
		4,781
	NO <sub>x</sub> Limit	0.45 Lb/mmBtu
UNIT 5	SO <sub>2</sub> Allowances, under	Years 2016 and Beyond

	Tables 2, 3, or 4 of 40 CFR Part 73	4,803
	NO <sub>x</sub> Limit	0.45 Lb/mmBtu

UNIT 6	SO <sub>2</sub> Allowances, under Tables 2, 3, or 4 of 40 CFR Part 73	Years 2016 and Beyond
		4,467
	NO <sub>x</sub> Limit	0.45 Lb/mmBtu

**PERMIT APPLICATION:** The permit application, including the NO<sub>x</sub> compliance plan, is attached and incorporated as part of this permit. The Permittee must comply with the standard requirements and special provisions set forth in the application.

**COMMENTS, NOTES, AND JUSTIFICATIONS:** This permit contains provisions related to sulfur dioxide (SO<sub>2</sub>) emissions and requires the Permittee to hold SO<sub>2</sub> allowances under the federal Acid Rain program to account for SO<sub>2</sub> emissions from the affected units. An allowance is a limited authorization to emit up to one ton of SO<sub>2</sub> during or after a specified calendar year. The transfer of allowances to and from a unit account does not necessitate a revision to the unit SO<sub>2</sub> allocations denoted in this permit (See 40 CFR 72.84).

This permit contains provisions related to NO<sub>x</sub> emissions requiring the affected units to comply with applicable emission limitations for NO<sub>x</sub> under the Acid Rain program. In addition to the described NO<sub>x</sub> compliance plan, each affected unit shall comply with all other applicable requirements of 40 CFR Part 76, including, the duty to reapply for a NO<sub>x</sub> compliance plan, and requirements covering excess emissions.

This permit does not affect the source's responsibility to meet all other applicable local, state and federal requirements, including state requirements under 35 Ill. Adm. Code Part 217 Subpart V, and 35 Ill. Adm. Code Part 225, which addresses NO<sub>x</sub> emissions from Joppa Units 1 through 6.

If you have any questions regarding this permit, please contact the CAAPP Unit at 217-785-1705.

Raymond E. Pilapil  
Manager, Permits Section  
Division of Air Pollution Control



OMB No. 2060-0258  
Approval expires 11/30/2012

For more information, see instructions and 40 CFR 72.30 and 72.31.

This submission is: ☐ New ☒ Revised ☐ for ARP permit renewal

Identify the facility name, State, and plant (ORIS) code.

Facility (Source) Name	Joppa	State	Illinois	Plant Code	887
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Enter the unit ID#  
for every affected  
unit at the affected  
source in column "a."

[illegible]

Facility (Source) Name (from STEP 1) <b>Joppa</b>
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### **Permit Requirements**

#### **STEP 3**

Read the standard requirements.

- (1) The designated representative of each affected source and each affected unit at the source shall:
  - (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
  - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
  - (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
  - (ii) Have an Acid Rain Permit.

### **Monitoring Requirements**

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

### **Sulfur Dioxide Requirements**

- (1) The owners and operators of each source and each affected unit at the source shall:
  - (i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and
  - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
  - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
  - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).



**Sulfur Dioxide Requirements, Cont'd.**

**STEP 3, Cont'd.**

- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

**Nitrogen Oxides Requirements**

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

**Excess Emissions Requirements**

- (1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
  - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
  - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

**Recordkeeping and Reporting Requirements**

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
  - (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission

Joppa
Facility (Source) Name (from STEP 1)

of a new certificate of representation changing the designated representative;

**STEP 3, Cont'd. Recordkeeping and Reporting Requirements, Cont'd.**

- (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
  - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
  - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

**Liability**

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

**Effect on Other Authorities**

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with

Facility (Source) Name (from STEP 1)	Joppa
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Page 5

any other provision of the Act, including the provisions of title I of the Act relating

**STEP 3, Cont'd.**

**Effect on Other Authorities, Cont'd.**

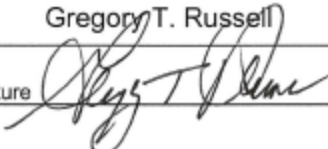
to applicable National Ambient Air Quality Standards or State Implementation Plans;  
 (2) Limiting the number of allowances a source can hold; *provided*, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;  
 (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;  
 (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,  
 (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

**STEP 4**

Read the certification statement, sign, and date.

**Certification**

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	Gregory T. Russell	
Signature		Date 8.5.16



United States  
Environmental Protection Agency  
Acid Rain Program

OMB No. 2060-0258  
Approval expires 11/30/2012

## Acid Rain NO<sub>x</sub> Compliance Plan

For more information, see instructions and refer to 40 CFR 76.9

Page 1

This submission is: ☐ New ☒ Revised

Page 1 of 2

### STEP 1

Indicate plant name, State, and Plant code from the current Certificate of Representation covering the facility.

Joppa	IL	887
Plant Name	State	Plant Code

### STEP 2

Identify each affected Group 1 and Group 2 boiler using the unit IDs from the current Certificate of Representation covering the facility. Also indicate the boiler type: "CB" for cell burner, "CY" for cyclone, "DBW" for dry bottom wall-fired, "T" for tangentially fired, "V" for vertically fired, and "WB" for wet bottom, and select the compliance option for each unit by making an 'X' in the appropriate row and column.

	ID# 1	ID# 2	ID# 3	ID# 4	ID# 5	ID# 6
	Type T	Type T	Type T	Type T	Type T	Type T
(a) Standard annual average emission limitation of 0.50 lb/mmBtu (for Phase I dry bottom wall-fired boilers)						
(b) Standard annual average emission limitation of 0.45 lb/mmBtu (for Phase I tangentially fired boilers)	X	X	X	X	X	X
(c) Standard annual average emission limitation of 0.46 lb/mmBtu (for Phase II dry bottom wall-fired boilers)						
(d) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase II tangentially fired boilers)						
(e) Standard annual average emission limitation of 0.68 lb/mmBtu (for cell burner boilers)						
(f) Standard annual average emission limitation of 0.86 lb/mmBtu (for cyclone boilers)						
(g) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)						
(h) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)						

## STEP 2, cont'd

Joppa
Plant Name (From Step 1)

	ID# 1	ID# 2	ID# 3	ID# 4	ID# 5	ID# 6
	Type T	Type T	Type T	Type T	Type T	Type T
(i) NO <sub>x</sub> Averaging Plan (include NO <sub>x</sub> Averaging form)						
(j) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(A) (check the standard emission limitation box above for most stringent limitation applicable to any unit utilizing stack)	X	X	X	X	X	X
(k) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(B) with NO <sub>x</sub> Averaging (check the NO <sub>x</sub> Averaging Plan box and include NO <sub>x</sub> Averaging Form)						
(l) EPA-approved common stack apportionment method pursuant to 40 CFR 75.17(a)(2)(i)(C), (a)(2)(iii)(B), or (b)(2)						

## STEP 3: Identify the first calendar year in which this plan will apply.

January 1, <u>2017</u>
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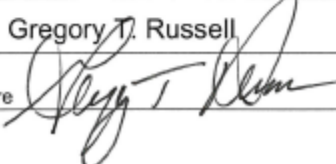
## STEP 4: Read the special provisions and certification, enter the name of the designated representative, sign and date.

## Special Provisions

General. This source is subject to the standard requirements in 40 CFR 72.9. These requirements are listed in this source's Acid Rain Permit.

## Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	Gregory T. Russell	
Signature		Date 8-5-16